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DISTRICT  
SINCE 1955

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**SUBJECT: NOTICE OF PREPARATION OF A DRAFT  
PROGRAM ENVIRONMENTAL IMPACT REPORT**

**PROJECT TITLE: Bay Area 2009 CLEAN AIR PLAN (CAP)**

In accordance with the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Sections 15082(a), 15103, and 15375), the Bay Area Air Quality Management District (BAAQMD) will be the Lead Agency for the project identified above and described in the attached Initial Study. Through this Notice of Preparation (NOP) BAAQMD is soliciting information and your views on the scope of the environmental analysis for the proposed project. As detailed in the attached Initial Study, BAAQMD staff has made a preliminary determination that there may be potentially significant impacts to air quality, hazards and hazardous materials, hydrology and water resources, and utilities and service systems.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Greg Tholen at the address shown below, or sent by FAX to (415) 749-4741, or by e-mail to [gtholen@baaqmd.gov](mailto:gtholen@baaqmd.gov). Comments must be received no later than 5:00 PM on September 21, 2009. Please include the name and phone number of the contact person for your agency. Questions relative to the proposed Bay Area 2009 CAP should be directed to Mr. David Burch at (415) 749-4641, or by email to [dburch@baaqmd.gov](mailto:dburch@baaqmd.gov).

The following public workshops and CEQA scoping meetings are scheduled for the proposed CAP:

**Wednesday, September 2—Mountain View**

9:30 am-11:30 am, Draft Control Strategy  
11:30am-12:00pm, CEQA Scoping Meeting  
Mountain View City Hall  
500 Castro Street  
Mountain View, CA 94039

**Thursday, September 3—Oakland**

1:30 pm-3:30pm, Draft Control Strategy  
3:30pm-4:00pm, CEQA Scoping Meeting  
MetroCenter Auditorium  
101 Eighth Street  
Oakland, CA 94607

Date: August 20, 2009

Signature: \_\_\_\_\_

Greg Tholen  
Principal Environmental Planner

*Spare the Air*

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**Bay Area Air Quality Management District**

**Initial Study**

**for the**

**Bay Area 2009 Clean Air Plan**



# **CHAPTER 1**

## **PROJECT DESCRIPTION**

Introduction

Agency Authority

Project Location

Background

Project Description



## **1.0 PROJECT DESCRIPTION**

### **1.1 INTRODUCTION**

The Bay Area Air Quality Management District (District or BAAQMD), in conjunction with the Metropolitan Transportation Commission and the Association of Bay Area Governments, is preparing the Bay Area 2009 Clean Air Plan (CAP). The proposed CAP provides a strategy for making progress toward attainment of the California ozone standards in the Bay Area. The 2009 CAP is an update of and progress report for the 2005 Ozone Strategy in compliance with the California Clean Air Act.

In response to state and federal requirements and guidelines, air quality planning in the Bay Area to date has been performed on a pollutant by pollutant basis, with an emphasis on ozone planning. However, in the past several years, there has been growing interest in the concept of multi-pollutant air quality planning. In January 2004, the National Research Council issued recommendations calling for air quality agencies to pursue a multi-pollutant, risk-based, "one atmosphere" approach for air quality planning. The United States Environmental Protection Agency (US EPA) has been moving to gradually embrace the concept of planning on a multi-pollutant basis. This update of the 2005 Ozone Strategy will provide a multi-pollutant approach to air quality planning in the Bay Area. Although there are no requirements to develop a multi-pollutant plan at this time, the multi-pollutant framework offers a number of potential benefits. The multi-pollutant plan addresses ozone, particulate matter, air toxics, and greenhouse gases via an integrated control strategy that is aimed at ozone planning requirements while identifying co-benefits and disbenefits of the control strategy on each of the pollutants.

### **1.2 AGENCY AUTHORITY**

CEQA, Public Resources Code §21000 et seq., requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. To fulfill the purpose and intent of CEQA, the BAAQMD is the lead agency for this project and has prepared the Notice of Preparation/Initial Study for the proposed Bay Area 2009 CAP Program Environmental Impact Report (PEIR). A PEIR is the appropriate document when a series of actions that can be characterized as one large project are related in the connection with the issuance or rules, regulations, plans, or other criteria to govern the conduct of a continuing program (CEQA Guidelines Section 15168(a)(3)).

The Lead Agency is the "public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment" (Public Resources Code Section 21067). It was determined that the BAAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines Section 15051(b)).

### 1.3 PROJECT LOCATION

The BAAQMD has jurisdiction of an area encompassing 5,600 square miles. The Air District includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano and southern Sonoma counties. The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys and bays (see Figure 1-1).

HA2240Map (Created) 10/27/04 (Drawn By) M.B. (Check By) D.B.S. (Last Rev.) 10/27/04

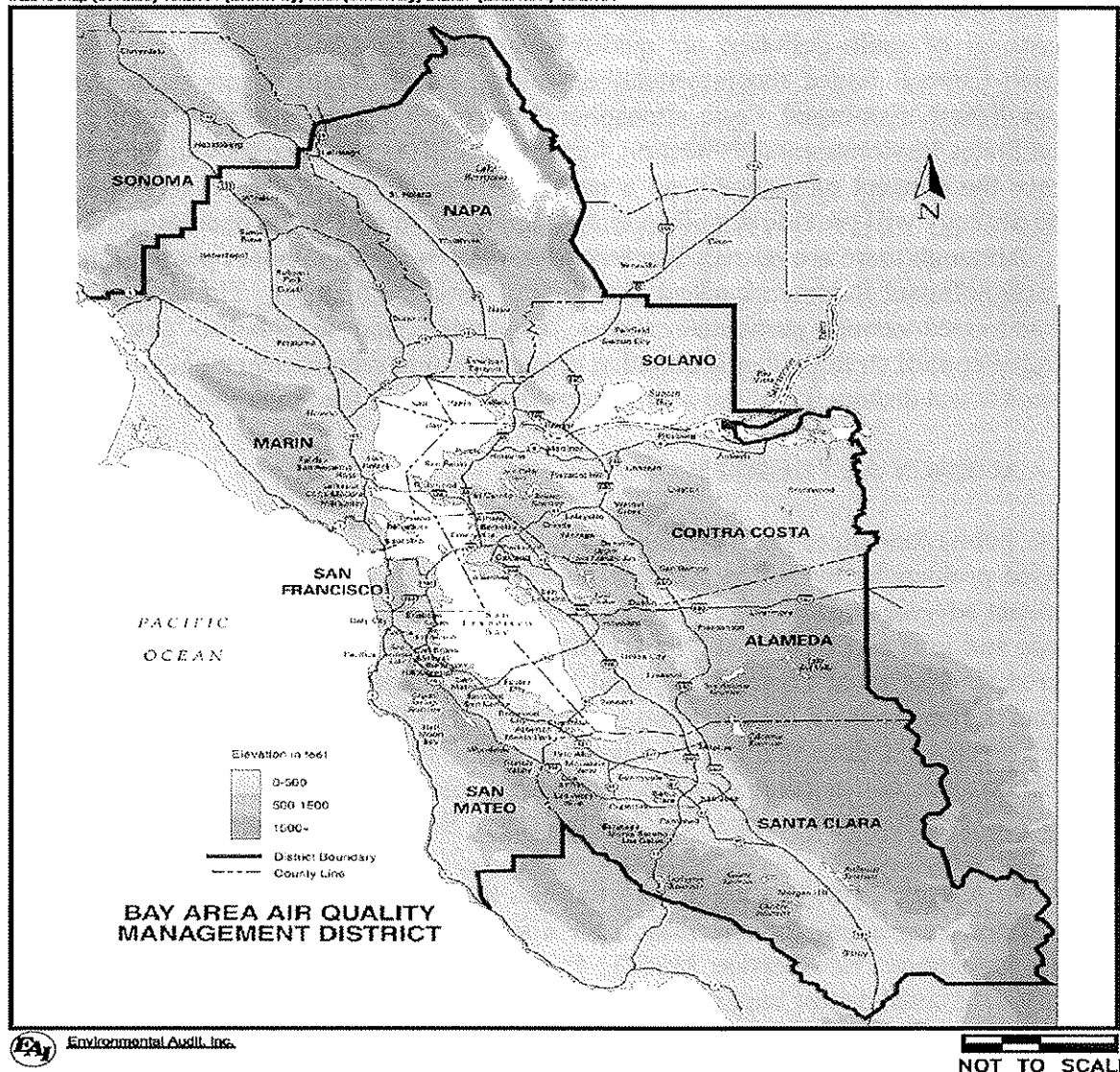


Figure 1-1 Bay Area Air Quality Management District Location



## 1.4 BACKGROUND

The California Clean Air Act requires regions that do not meet the State ozone standards to prepare plans for attaining the standards, and to update these plans every three years. In summary, these plans must include estimates of current and future emissions of the pollutants that form ozone, and a control strategy, including “all feasible measures,” to reduce these emissions. The plans must also address the transport of air pollutants to certain neighboring regions.

The first Bay Area plan for the State ozone standards was the 1991 Clean Air Plan. Subsequently, the Clean Air Plan was updated and revised in 1994, 1997, 2000 and 2005. Each of these triennial updates proposed additional measures to reduce emissions from a wide range of sources, including industrial and commercial facilities, motor vehicles, and “area sources.” The 2005 Ozone Strategy was the last triennial update to the Bay Area strategy to achieve the State ozone standards.

BAAQMD has taken a multi-pollutant control strategy approach for developing the 2009 CAP. The multi-pollutant plan addresses ozone, particulate matter, air toxics, and greenhouse gases via an integrated control strategy that is aimed at ozone planning requirements while identifying co-benefits and disbenefits of the control strategy on each of the pollutants.

Ground-level ozone can cause respiratory problems and premature mortality, especially among sensitive populations, such as children, seniors, and people with lung conditions. Ozone also reduces crop yields and accelerates deterioration of paints, finishes, rubber products, plastics, and fabrics. Both the US EPA and the California Air Resources Board (CARB) have established health-based ambient air standards for ground-level ozone. The California ozone standards are currently set at 0.09 parts per million (ppm) averaged over one hour, and 0.07 ppm averaged over eight hours. The San Francisco Bay Area air basin is designated as a nonattainment area for both the California 1-hour ozone standard and the California 8-hour ozone standard.

Because ozone is formed through chemical reactions between reactive organic gases (ROG) and nitrogen oxides (NOx) in the presence of sunlight, efforts to reduce ozone seek to limit emissions of ROG and NOx into the atmosphere. In general, ROG comes from evaporation or incomplete combustion of fuels, from the use of solvents in cleaning operations and in paints and other coatings, and in various industrial and commercial operations. NOx is produced through combustion of fuels by mobile sources – cars, trucks, construction equipment, locomotives, aircraft, marine vessels – and stationary sources such as power plants and other industrial facilities.

Exceedances of the California and national ozone standards in the Bay Area have decreased significantly with the regulation and reduction of ozone precursor emissions (i.e. ROG and NOx). This improvement is due to State and national regulations requiring cleaner motor vehicles and fuels, District regulations requiring reduced emissions from

industrial and commercial sources, as well as programs to reduce the use of motor vehicles.

Particulate matter includes fine PM ( $PM_{2.5}$ ) and coarser particles ( $PM_{10}$ ). While  $PM_{10}$  is directly emitted as dust and smoke,  $PM_{2.5}$  is a complex pollutant that is both directly emitted as well as created by secondary formation via chemical reactions in the atmosphere that transform 1)  $NO_x$  and ammonia to ammonium nitrate and 2) sulfur dioxide and ammonia to ammonium sulfate. PM has been documented to cause a wide range of health effects including bronchitis, asthma, heart attacks, and mortality.

There are hundreds of toxic air contaminants (TAC) (e.g. diesel PM, benzene, 1,3-butadiene, formaldehyde, acetaldehyde, hexavalent chromium, etc.) that can cause a wide range of acute and chronic health effects, including cancer and mortality. There are no ambient air quality standards for TACs, because, for regulatory purposes, it is assumed that there is no safe threshold below which health impacts will not occur.

Greenhouse gases (GHG) refer to gases that contribute to global warming. In addition to negative impacts on air quality as higher temperatures contribute to increased levels of ozone and PM, climate change may cause a wide range of ecological, social, economic, and demographic impacts at both the global and the local scale. The CAP will seek to maximize reductions of greenhouse gases, primarily carbon dioxide ( $CO_2$ ) and methane, in crafting a control strategy to reduce ambient concentrations of ozone, PM, and air toxics.

## **1.5 PROJECT DESCRIPTION**

The CAP will include an assessment of the region's progress toward attaining the California ozone standards and reducing exposure to ozone and other pollutants. The State has not set a deadline to attain the California ozone standards. The CAP will identify "all feasible measures," as required by the California Clean Air Act, for control of ozone precursors that will assist the Bay Area in attaining the California ozone standards and address pollutant transport to downwind regions. The CAP will be prepared in accordance with applicable provisions of the California Clean Air Act. It will update the Bay Area 2005 Ozone Strategy adopted by the District Board of Directors on January 4, 2006.

Measures included in the CAP are expected to produce environmental benefits by reducing emissions of ozone precursors and other air pollutants. The environmental review of the CAP will evaluate whether any measures may have secondary adverse environmental impacts, which could occur, for example, through the use of an emission reduction technology that itself may cause some adverse impact. The District has prepared a preliminary list of measures that may be included in the CAP. The list is likely to undergo further revision as the CAP is finalized.

## **Overview of the Control Strategy**

The CAP control strategy will consist of a comprehensive set of control measures to reduce emissions from both stationary sources and mobile sources. Proposed control measures in the CAP will augment the extensive federal, state, regional and local regulations and programs that are already in place. The CAP will include the following five types of measures:

**Stationary and area source measures** based upon the District's authority to regulate emissions from sources such as factories and refineries;

**Transportation control measures** to reduce motor vehicle use, promote alternative modes of transportation, reduce traffic congestion, and promote efficient vehicle use;

**Mobile source measures** to promote the use of cleaner vehicles and fuels and to accelerate the retrofit or replacement of high-emitting vehicles and equipment;

**Land use and local impacts measures** to promote focused growth and minimize population exposure to air pollutants in impacted communities; and

**Energy and climate measures** to promote energy efficiency, alternative and renewable forms of energy, and urban heat island mitigation via cool roofing, cool paving, tree-planting, and ventilation.

Table 1-1 below provides a list and description of the control measures being considered for the 2009 CAP. The potential environmental impacts of the proposed control measures are included in Appendix A.

MTC approved a variety of transportation control measures and strategies in the Transportation 2035 Regional Transportation Plan. These measures and recommendations have accordingly been moved forward for inclusion in the region's air quality plans and are included as part of the 2009 CAP, along with additional TCMs proposed to be implemented by BAAQMD, local governments, and others. The impacts of implementation of the TCMs approved by MTC were evaluated in a separate CEQA document, the Final Environmental Impact Report for the Transportation 2035 Plan for the San Francisco Bay Area (SCH No. 2008022101) (MTC, 2009). A list of the TCMs from the 2035 Transportation Plan is included in Table 1-1. The Draft PEIR for the 2009 CAP will rely on the environmental analyses in the MTC 2009 Final PEIR for the evaluation of the environmental impacts of implementing the TCMs developed by MTC. Environmental impacts from implementing the TCMs proposed in the 2009 CAP will be addressed in the Draft PEIR for the 2009 CAP under cumulative impacts.

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
<b>Stationary and Area Source Measures</b>		
SSM 1	Ferrous and Nonferrous Foundries and Metal-Melting Facilities	Limit emissions of organic compounds, fine particulates, toxic compounds and odors from foundries operations and metal melting in the District by requiring efficient capture and control systems.
SSM 2	Composting Operations	Establish best composting practices to reduce ROG, ammonia and odors.
SSM 3	Digital Printing	Establish VOC limits or control requirements for inkjet, electro-photographic and other digital printing technologies.
SSM 4	General Particulate Matter Weight Rate Limitation	Reduce particulate weight limitation as a function of exhaust gas volume and/or as a function of process weight rate.
SSM 5	Greenhouse Gases in Permitting – Energy Efficiency	Consider greenhouse gas (GHG) emissions during permitting of new or modified stationary sources. This includes (1) adopting GHG CEQA significance threshold for stationary sources, and (2) requiring GHG reduction measures in ministerial permits.
SSM 6	Livestock Waste	Establish management practices to reduce ROG, ammonia, PM, GHG.
SSM 7	Natural Gas Processing and Distribution	Reduce emissions from natural gas production facilities.
SSM 8	Vacuum Trucks	Require carbon or other control technology on vacuum trucks.
SSM 9	Cement Kilns	Further limit NOx and SOx from cement production.
SSM 10	Coke Calcining	Reduce SOx emissions from coke calcining.
SSM 11	Open Burning	Further limit agricultural burning of some crops to be burned on a given day.
SSM 12	Refinery Boilers and Heaters	Further reduce NOx emissions from refinery boilers, heaters and steam generators.
SSM 13	Residential Fan Type Furnaces	Reduce allowable NOx limits for residential furnaces.
SSM 14	Space Heating	Establish NOx limits for industrial and commercial space heating.
SSM 15	Dryers, Ovens, Kilns	Establish NOx limits for industrial dryers, ovens and kilns.
SSM 16	Glass Furnaces	Reduce NOx limits in Regulation 9, Rule 12 for glass furnaces.

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
SSM 17	Revise Regulation 2, Rule 2: New Source Review	Amend Reg. 2, Rule 2 to address the District's anticipated non-attainment status of the 24-hour PM <sub>2.5</sub> National Ambient Air Quality Standard. In addition, more stringent standards will be considered for sources located in areas of sensitive populations as identified by the District's CARE program.
SSM 18	Revise Regulation 2, Rule 5: New Source Review for Air Toxics	To reduce cumulative impacts in impacted communities, revise District permitting requirements via amendments to Reg. 2, Rule 5, New Source Review of Toxic Air Contaminants (TACs), to impose more stringent standards for new and modified sources located in impacted communities as identified by the District's CARE program.
SSM 19	Revise Air Toxics "Hot Spots" Program	Revise the District's Air Toxics Hot Spots program which focuses on existing sources of toxic air contaminants to incorporate more stringent risk reduction requirements.
<b>Transportation Control Measures</b>		
TCM A-1	Improve Local and Areawide Bus Service	Improve transit by providing new Express Bus or Bus Rapid Transit on major travel corridors, funding the replacement of older and dirtier buses, and implementing Transit Priority Measures on key transit routes.
TCM A-2	Improve Local and Regional Rail Service	Improve rail service by sustaining and expanding local and regional rail services and by providing funds to maintain rail-cars, stations, and other rail capital assets.
TCM A-3	Improve Ferry Service	Improve ferry service by sustaining and expanding Transbay ferry services, consistent with MTC's Resolution 3434 Regional Transit Expansion Program and the Water Emergency Transportation Authority's Ferry Plan.
TCM B-1	Implement Freeway Performance Initiative	Improve the performance and efficiency of freeway and arterial systems through operational improvements, including implementing the Freeway Performance Initiative, the Arterial Management Program and the Bay Area Freeway Service Patrol.
TCM B-2	Improve Transit Efficiency and Use	Improve transit efficiency and use through continued operation of 511 Transit, and full implementation of TransLink <sup>®</sup> fare payment system and the Transit Hub Signage Program.

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
TCM B-3	Bay Area Express Lane Network	Introduce roadway pricing on Bay Area highways through the implementation of an express lane network, also known as a High Occupancy Toll (HOT) lane network.
TCM B-4	Goods Movement Improvements and Emission Reduction Strategies	Improve goods movement and reduce emissions from diesel equipment through implementation of the Bay Area's Trade Corridors Improvement Fund (TCIF) projects and various BAAQMD funding programs to replace or retrofit diesel equipment.
TCM C-1	Support Voluntary Employer-Based Trip Reduction Program	Support voluntary employer trip-reduction programs through the implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs, BAAQMD's Spare the Air Program, encouraging cities to adopt transit benefit ordinances, and supporting Bay Area shuttle service providers.
TCM C-2	Implement Safe Routes to Schools and Safe Routes to Transit	Facilitate safe routes to schools and transit by providing funds and working with transportation agencies, local governments, schools, and communities to implement safe access for pedestrians and cyclists.
TCM C-3	Promote Rideshare Services and Incentives	Promote rideshare services and incentives through the implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs including marketing rideshare services, operating rideshare information call center and website, and providing vanpool support services.
TCM C-4	Conduct Public Outreach and Education	Educate the public about the air quality, environmental, and social benefits of carpooling, vanpooling, taking public transit, biking, walking, and telecommuting, through the Spare the Air campaign and Transportation Climate Action Campaign.
TCM C-5	Promote Smart Driving/Speed Moderation	Educate the public about the air quality and climate protection benefits of reducing high-speed driving and observing posted speed limits.
TCM D-1	Improve Bicycle Access and Facilities	Expand bicycle facilities serving transit hubs employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
TCM D-2	Improve Pedestrian Access and Facilities	Provide funding for projects to improve pedestrian access to transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.
TCM D-3	Support Local Land Use Strategies	Promote land use patterns, policies, and infrastructure investments that support mixed-use, transit-oriented development that reduce motor vehicle dependence and facilitate walking, bicycling and transit use.
TCM E-1	Value Pricing Strategies	Test and implement value pricing (congestion pricing) on Bay Area toll bridges to manage travel demand during congested periods. Measure may also include value pricing in the City of San Francisco.
TCM E-2	Parking Pricing and Management Strategies	Promote policies to implement market-rate pricing of parking facilities, reduce parking requirements for new development projects, parking “cash-out”, unbundling of parking in residential and commercial leases, shared parking at mixed-use facilities, etc.
TCM E-3	Implement Transportation Pricing Reform	Develop a regional transportation pricing strategy that includes policy evaluation and implementation. Pricing policies to be evaluated include gasoline taxes, bridge tolls, congestion pricing, parking pricing, HOT lanes, VMT or carbon fees, pay-as-you-drive insurance, etc.
<b>Mobile Source Control Measures (On-Road Light Duty Vehicles)</b>		
MSM A-1	Promote Clean, Fuel Efficient Light & Medium-Duty Vehicles	Expand the use of Super Ultra-low Emission (SULEV) and Partial -Zero emission (PZEV) light-duty passenger vehicles and trucks within the Bay Area.
MSM A-2	Zero Emission Vehicles and Plug-in Hybrids	Expand the use of Zero Emission (ZEV) and Plug-in Hybrid (PHEV) passenger vehicles and light-duty trucks within the Bay Area, working in partnership with the Bay Area Electric Vehicle Corridor coalition.
MSM A-3	Green Fleets (Light, Medium & Heavy-Duty Vehicles)	Develop a green fleet certification component of the Bay Area Green Business program, promote best practices for green fleets, and evaluate existing grant programs to ensure incentive funding is directed towards fleets and vehicles that meet stringent fuel economy standards.

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
MSM A-4	Replacement or Repair of High-Emitting Vehicles	Enhancements to the Air District's Vehicle Buy Back program to increase participation from car owners; e.g., via higher cash payments and/or increased marketing. Consider including motorcycles, or other potential enhancements, e.g. implementing the SCAQMD's vehicle repair program. Pursue improvements to the District's Smoking Vehicle program.
<b>Mobile Source Control Measures (On-Road Heavy Duty Vehicles)</b>		
MSM B-1	HDV Fleet Modernization	Provide incentives to accelerate the replacement or retrofit of on-road heavy-duty diesel engines in advance of requirements for the ARB in-use heavy-duty truck regulation.
MSM B-2	Low NOx Retrofits for In-Use Engines	Provide cash incentives to install retrofit devices that reduce NOx emissions from MY 1994-2006 heavy-duty engines. Continue requiring software updates to engine control modules in model year 1993-1998 diesel trucks as a condition of all heavy duty vehicle retrofit grants.
MSM B-3	Efficient Drive Trains	Encourage development and demonstration of hybrid drive trains for medium- and heavy-duty vehicles, in partnership with ARB, CEC and other existing programs.
<b>Mobile Source Control Measures (Off-Road Equipment)</b>		
MSM C-1	Construction and Farming Equipment	Reduce emissions from construction and farming equipment by 1) cash incentives to retrofit construction and farm equipment with diesel particulate matter filters or upgrade to a Tier III or IV off-road engine; 2) work with CARB, CEC and others to develop more fuel efficient off-road engines and drive-trains; 3) work with local communities, contractors and developers to encourage the use of renewable alternative fuels in applicable equipment.
MSM C-2	Lawn & Garden Equipment	Reduce emissions from lawn and garden equipment through voluntary retirement and replacement programs.
MSM C-3	Recreational Vessels	Reduce emissions from recreational vessels through voluntary retirement and replacement programs.



**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
<b>Land Use and Local Impact Control Measures</b>		
LUM 1	Indirect Source Review Rule	Develop an indirect source review rule to reduce construction and vehicular emissions associated with new or modified land uses in the Bay Area.
LUM 2	Enhanced CEQA Program	1) Develop revised CEQA guidelines and thresholds of significance and 2) expand District review of CEQA documents.
LUM 3	Reduce Risk from Stationary Sources in Impacted Communities	Establish a system to track cumulative health risks associated with permitted stationary sources in order to monitor progress in reducing population exposure in impacted communities as identified by the District's CARE program.
LUM 4	Goods Movement	Reduce diesel PM and GHG emissions from goods movement in the Bay Area through targeted enforcement of CARB diesel ATCMs in impacted communities, partnerships with ports and other stakeholders, increased signage indicating truck routes and anti-idling rules, shifts in freight transport mode, shore-side power for ships, and improvements in the efficiency of engine drive trains, distribution systems (roadways, logistic systems) and land use patterns.
LUM 5	Land Use Guidelines	Provide guidance to local governments re: 1) air quality and greenhouse gases in General Plans, and 2) how to address and mitigate population exposure related to infill development.
LUM 6	Enhanced Air Quality Monitoring	Expand monitoring program to provide better local air quality monitoring data in impacted communities.
<b>Energy and Climate Control Measures</b>		
ECM 1	Urban Heat Island Mitigation	Mitigate the "urban heat island" effect by requiring and promoting the implementation of cool roofing, cool paving and other strategies.
ECM 2	Renewable Energy	Promote distributed renewable energy generation (solar, micro wind turbines, cogeneration, etc.) on commercial and residential buildings, and at industrial facilities

**TABLE 1-1 BAAQMD 2009 Clean Air Plan Control Measures**

<b>Number</b>	<b>Name</b>	<b>Description</b>
ECM 3	Energy Efficiency	Provide 1) education to increase energy efficiency; 2) technical assistance to local governments to adopt and enforce energy-efficient building codes; and 3) incentives for improving energy efficiency at schools.
ECM 4	Tree-Planting	Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, and absorb CO2 and other air pollutants.

## CHAPTER 2

### ENVIRONMENTAL CHECKLIST

#### ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Bay Area 2009 Clean Air Plan.
2. Lead Agency Name and Address: Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109
3. Contact Person and Phone Number: Greg Tholen, Principal Environmental Planner  
415-749-4954 or gtholen@baaqmd.gov
4. Project Location: The 2009 Clean Air Plan applies to the area within the jurisdiction of the Bay Area Air Quality Management District, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.
5. Project Sponsor's Name and Address: Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109
6. General Plan Designation: The 2009 Clean Air Plan applies to the area within the jurisdiction of the Bay Area Air Quality Management and would encompass all general plan designations within the Bay Area.
7. Zoning: The 2009 Clean Air Plan applies to the area within the jurisdiction of the Bay Area Air Quality Management and would encompass all types of zoning within the Bay Area.
8. Description of Project: See "Project Description" in Chapter 1.
9. Surrounding Land Uses and Setting: See "Project Description" in Chapter 1.
10. Other public agencies whose approval is required: California Air Resources Board

## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this Project (i.e., the project would involve one impact that is a "Potentially Significant Impact"), as indicated by the checklist on the following pages.

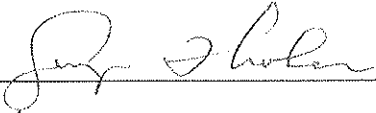
- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics                               | <input type="checkbox"/> Agriculture Resources                         | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources                     | <input type="checkbox"/> Cultural Resources                            | <input type="checkbox"/> Geology/Soils          |
| <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality            | <input type="checkbox"/> Land Use/Planning      |
| <input type="checkbox"/> Mineral Resources                        | <input type="checkbox"/> Noise   | <input type="checkbox"/> Population/Housing     |
| <input type="checkbox"/> Public Services                          | <input type="checkbox"/> Recreation                                    | <input type="checkbox"/> Transportation/Traffic |
| <input checked="" type="checkbox"/> Utilities/Service Systems     | <input checked="" type="checkbox"/> Mandatory Findings of Significance |   |

## DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☒ I find that the proposed project MAY have a significant effect on the environment, and a PROGRAM ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
 Signature

August 20, 2009  
 Date

Greg Tholen  
 Printed Name

Principal Environmental Planner  
 Title

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
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## I. AESTHETICS.

Would the project:

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The 2009 Clean Air Plan (CAP) would affect various emissions sources within the Bay Area in various locations. Scenic highways or corridors are located in areas affected by the proposed CAP.

## Discussion of Impacts

**I. a) – c):** The proposed control measures in the 2009 CAP are not expected to adversely affect scenic vistas in the district; damage scenic resources, including but not limited to trees, rock outcroppings, or historic buildings within a scenic highway; or substantially degrade the visual character of a site or its surroundings. The reason for this conclusion is that most of the proposed control measures typically affect existing commercial or industrial facilities and reduce emissions from mobile sources, increase energy efficiency, as well as measures to minimize emissions from indirect sources. Industrial or commercial facilities are typically located in appropriately zoned areas (e.g., industrial and commercial areas) that are not usually associated with scenic resources. Construction activities are expected to be limited to industrial and commercial areas. Further, modifications typically occur inside the buildings at the affected facilities, or because of the nature of the business (e.g., commercial or industrial) can easily blend with the facilities with little or no noticeable effect on adjacent areas.

For example, some of the control measures would require additional NO<sub>x</sub> controls on cement kilns (SSM 9), refinery boilers and heaters (SSM 12), and glass furnaces (SSM 16). These control measures could lead to changes in operations or installation of air pollution control devices. While these control devices may be visible to surrounding areas, they would be used within the industrialized areas, which contain cement plants, refineries, and other similar structures. Therefore, no significant adverse aesthetic impacts would be expected.

The Indirect Source Review Measure (LUM 1) and Land Use Guidelines (LUM 5) would attempt to influence land uses associated with new development to minimize air emissions. Development itself has the potential for aesthetic impacts, however, the Indirect Source Control and Land Use Guidelines Measures could influence land uses, for example affecting the number of units, or encouraging bike lanes or pedestrian improvements, or require the payment of fees. Therefore, the Indirect Source Control and Land Use Guidelines Measures are not expected to result in modifications to new development that would generate significant aesthetic impacts. The aesthetic impacts of new development will be evaluated on a case-by-case basis by the appropriate lead agency and are generally subject to CEQA requirements. Any potential impacts can be mitigated by the local land use agency using General Plan and CEQA guidance.

Additional trees could be planted under the Tree Planting Measure (ECM 4). Trees have the potential to block desirable views as well as provide aesthetically pleasing impacts by screening undesirable views (e.g., freeways and streets). This control measure would likely be implemented through local ordinances or as mitigation under CEQA. Aesthetic impacts associated with trees can be handled on a case-by-case basis by developing appropriate planting locations and avoid impacting scenic vistas.

Some control measures would encourage the use of alternative energy sources which could result in the installation of solar panels to generate solar power (ECM 2). Solar panels would be expected to be installed on existing structures to supply electricity as an alternate energy source. Aesthetic impacts would not be expected for the installation of solar panels on new or existing buildings as local land use agencies have development standards in place to ensure significant adverse impacts do not occur.

Some control measures (e.g., LUM 4) could require the installation of additional signs. For example, LUM 4 would increase signs indicating truck routes and anti-idling rules. Such signs are expected to be placed along existing streets and highways and are expected to be similar in size with existing traffic control signs (e.g., stop signs) and near eye-level of drivers. These signs are not expected to impact scenic resources as they would be relatively small and located along existing routes.

The 2009 CAP may have a beneficial effect on scenic resources by improving visibility and reducing regional haze.

**I. d):** The proposed 2009 CAP is not expected to create additional demand for new lighting that could create glare that could adversely affect day or nighttime views in any areas. As noted in item I. a) – c) above, facilities affected by proposed control measures typically make modifications in the interior of an affected facility so any new light sources would typically be inside a building or not noticeable because of the presence of existing outdoor light sources. Further, operators of commercial or industrial facilities who would make physical modifications to facilities and may require additional lighting would be located in appropriately zoned areas that are not usually located next to residential areas, so new light sources, if any, are not expected to be noticeable in residential areas. Most local land use agencies have ordinances that limit the intensity of lighting and its effects on adjacent property owners.

## **Conclusion**

Based upon the above considerations, significant adverse project-specific aesthetic impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## II. AGRICULTURE RESOURCES.

In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Some of these agricultural lands are under Williamson Act contracts. The control measures would impact industrial and commercial facilities located throughout the area within the jurisdiction of the BAAQMD.



## Discussion of Impacts

**II. a) - c):** The 2009 CAP control measures typically affect existing commercial or industrial facilities, reduce emissions from mobile sources, and reduce emissions from land use decisions. The control measures are not expected to generate any new construction of buildings or other structures that would require conversion of farmland to non-agricultural use or conflict with zoning for agricultural uses or a Williamson Act contract. There are no provisions in the proposed 2009 CAP that would affect or conflict with existing land use plans, policies, or regulations or require conversion of farmland to non-agricultural uses. Some control measures could impact agricultural facilities and farmers by controlling emissions from construction and farming equipment (MSM B 5) and reducing emissions from livestock wastes (SSM 4). However, these control measures are not expected to convert agricultural land uses to non-agricultural land uses. Land use, including agriculture-related uses, and other planning considerations are determined by local governments and no agricultural land use or planning requirements will be altered by the proposed project. The 2009 CAP could provide benefits to agricultural resources by reducing air pollutants, including ozone precursors and, thus, reducing the adverse impacts of ozone on plants and animals.

The Indirect Source Review Measure (LUM 1) would attempt to influence land uses associated with new development to minimize air emissions. Development itself has the potential for impacts to agricultural resources, however, the Indirect Source Review Control Measure could influence land uses, for example affecting the number of units, or encouraging bike lanes or pedestrian improvements, or require the payment of fees. Therefore, the Indirect Source Control Measure is not expected to result in modifications to new development that would generate significant impacts on agricultural resources or encourage the development of existing agricultural lands. As a result, Land Use and Local Impact Measures are not expected to adversely affect local land use policies or result in the conversion of agricultural lands to non-agricultural land uses.

The open burning control measure (SSM 9) would limit the amount of agricultural burning on any given day to minimize excessive smoke and particulate matter emissions. Although the control measure would limit the amount of open burning on a given day, open burning would be allowed to occur on other days. This measure is expected to spread out open burning so that it is not concentrated on certain days or in certain areas. Since open burning would still be allowed, impacts on farmers and agricultural resources are expected to be minimal.

### Conclusion

Based upon the above considerations, significant adverse project-specific impacts to agricultural resources are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further analyzed in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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### III. AIR QUALITY:

When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- |   |                                     |                          |                                     |                                     |
|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute to an existing or projected air quality violation?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| d) Expose sensitive receptors to substantial pollutant concentrations?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) Create objectionable odors affecting a substantial number of people?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Setting

It is the responsibility of the BAAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), particulate matter less than 10 microns in diameter (PM<sub>10</sub>), particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), and lead.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. Ambient concentrations of air pollutants and the number of days on which the region exceeds air quality standards have fallen. The Air District is in attainment of the State and federal ambient air quality standards for CO, nitrogen oxides (NO<sub>x</sub>), and SO<sub>2</sub>. The Air District is not considered to be in attainment with the State PM<sub>10</sub> and PM<sub>2.5</sub> standards. At the time of this writing, the U.S. EPA has recommended that the Bay Area be designated nonattainment of the new lower standard for the 24-hour PM<sub>2.5</sub> NAAQS of 35 µ/m<sup>3</sup>. The designation is not official until it is published in the Federal Register. The Bay Area is designated as non-attainment for the federal 8-hour and California 1- and 8-hour ozone standards.

## Discussion of Impacts

**III. a):** The proposed project is an update of the BAAQMD's 2005 Ozone Strategy, which is required pursuant to state law. By revising and updating emission inventories and control strategies, the BAAQMD is complying with state law, and furthering development and implementation of control measures, which are expected to reduce emissions and make progress towards attaining and maintaining state and federal ambient air quality standards for ozone and particulate matter in the District. The 2009 CAP will also implement control measures to reduce toxic air contaminants and greenhouse gases. The 2009 CAP will update and replace the 2005 Ozone Strategy as the air quality plan for the Bay Area, therefore, no significant impact is expected and this topic will not be further evaluated in the Draft PEIR.

**III. b), d):** The anticipated effect of implementing the 2009 CAP is obtaining new or further emissions reductions from both stationary and mobile sources. Therefore, the overall effect of the 2009 CAP is expected to be a beneficial impact on air quality. Implementing control measures often requires installing air pollution control equipment. Although the primary effect of installing air pollution control equipment is to reduce emissions of a particular pollutant, e.g., VOCs, some types of control equipment have the potential to create secondary adverse air quality impacts, e.g., increased NO<sub>x</sub> emissions if VOC emissions are controlled through a combustion process (e.g., afterburner) or require additional energy to operate. Further, some facility operators may elect to reduce their VOC emissions by replacing the high-VOC materials with alternative chemicals or

water-based formulations that may contain toxic compounds, such as formaldehyde or glycol ethers. As a result, material replacement or reformulation to reduce the use of high-VOC materials has the potential to result in health risks associated with exposure to both carcinogenic and non-carcinogenic toxic air contaminants. Control measures aimed at reducing NO<sub>x</sub> from stationary sources may use ammonia for control (e.g., selective catalytic reduction). Ammonia use could result in increased ammonia emissions and, since ammonia is a precursor to particulate formation, increased particulate emissions. Because of the potential for secondary emissions from air pollution control equipment or reformulated products, there is a potential that sensitive receptors could be exposed to increased pollutant concentrations, which may be significant. As a result, these potential air quality impacts will be evaluated in the Draft PEIR.

All control measures are expected to improve air quality overall by reducing NO<sub>x</sub>, particulate matter, GHG, and/or toxic air contaminant emissions, but there may be certain limited trade-offs. The 2009 CAP control measures would promote an increase in the use of electricity, e.g., use of Clean Vehicles, Zero Emission Vehicles and Hybrids (MSM A-1 and MSM A-2), encourage the use of green fleets (MSM A-3 and MSM B-1), electrifying equipment at ports (LUM 4) and increased use of hybrid drive trains (MSM B-3). These control measures are expected to reduce the use of fossil fuels resulting in a decrease in the emissions of NO<sub>x</sub>, particulate matter, and diesel particulate emissions. The control measures would also result in the need for additional electricity and potentially result in the construction and operation of new electrical power plants and increased emissions from power plants and these impacts will be evaluated in the PEIR.

Emissions from one pollutant may increase slightly in order to effectively reduce overall emissions and protect public health. Diesel particulate emissions are expected to be reduced through the use of diesel particulate filters (MSM C-1). This control measure also has the potential to reduce engine efficiency and increase fuel use under certain circumstances. Potentially significant impacts on criteria pollutants may occur due to: use of diesel particulate filters (MSM C-1); and use of biodiesel or alternative diesel fuel. The reformulation of digital printing ink (SSM 3) is expected to result in a decrease in VOC emissions, but could also result in potentially significant air toxics impacts, depending on the materials used in the reformulated products. The use of new fuel or alternative fuels (MSM A-3 and MSM C-1) may also result in a decrease in criteria and diesel particulate emissions, but could result in an increase in other toxic air contaminants. As a result, these potential air quality impacts will be evaluated in the Draft PEIR.

**III. c):** The overall effect of the 2009 CAP is expected to be a decrease in emissions of ozone precursors (NO<sub>x</sub> and VOC), particulate matter, toxic air contaminants, and GHG. Therefore, the cumulative air quality impacts of the proposed 2009 CAP are expected to be beneficial. However, some proposed control measures may individually result in an incremental contribution to existing adverse air quality conditions.

The mobile source control measures, transportation control measures, and indirect source control measures are intended to encourage replacement of old, inefficient engines and/or reduce vehicle miles traveled and they will reduce criteria pollutant emissions as well as GHG emissions as compared to the No Project Alternative. However, secondary air quality impacts of some control measures may include increased emissions. For example, potentially significant global warming impacts could result from measures that may reduce fuel efficiency, increase energy use or strategies that increase natural gas consumption (e.g., increased electricity production). Cumulative air quality impacts from implementing the 2009 CAP will be evaluated in the Draft PEIR.

**III. e):** Previous environmental analyses of projects evaluating implementation of air quality plan control measures into rules or regulations, especially control measures that involve reformulated coatings or solvents, have included assessments of potential odor impacts. Although in some cases reformulated products have noticeable odors, it is typically the case that reformulated products have less noticeable odors than the products they are replacing. Reformulated products tend to have reduced VOC content and reduced emissions and, therefore, fewer potential odor impacts. As a result, significant adverse odor impacts have not been associated with reformulated products compared to conventional high VOC products. Measures that would control composting operations (SSM 2) and livestock waste (SSM 6) would tend to reduce odor impacts associated with composting and livestock operations. Modifications required at industrial facilities because of the 2009 CAP would still be subject to existing air quality rules and regulations, including BAAQMD's Regulation 7--Odorous Substances, which prohibits creating odor nuisances. For these reasons, implementing the 2009 CAP is not expected to create significant adverse odor impacts and, therefore, will not be further addressed in the Draft PEIR.

**III. f):** Promulgating control measures for stationary sources and mobile sources into rules or regulations typically serves to strengthen an existing rule or regulation, not weaken it. Similarly, control measures included in the CAP may be promulgated as a new rule or regulation, which typically controls emissions from unregulated or minimally regulated sources. As a result, the proposed project will not diminish an existing air quality rule. This topic will not be further analyzed in the Draft PEIR.

## **Conclusion**

The goal of the CAP is to protect public health by achieving the state and federal ambient air quality standards. The 2009 CAP is expected to result in large emission reductions; however, secondary adverse air quality impacts may occur from implementing some of individual control measures in the CAP due to localized increases in criteria pollutant or toxic air contaminant emissions from certain types of air pollution control equipment. Therefore, potential adverse air quality impacts resulting from implementing the 2009 CAP will be evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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#### IV. BIOLOGICAL RESOURCES.

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- |    |   |                          |                          |                                     |                                     |
|----|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| e) | Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) | Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. A wide variety of biological resources are located within the Bay Area.

The entire area under the jurisdiction of the BAAQMD is affected by the proposed control measures, and is located within the Bay Area-Delta Bioregion (as defined by the State's Natural Communities Conservation Program). This Bioregion is comprised of a variety of natural communities, which range from salt marshes to chaparral to oak woodland. A majority of the affected areas have been graded to develop various commercial or residential structures. Native vegetation, other than landscape vegetation, has generally been removed from areas to minimize safety and fire hazards. Any new development would be required to comply with local ordinances and plans.

## Discussion of Impacts

**IV. a), b), d):** No direct or indirect impacts from implementing 2009 CAP control measures were identified that could adversely affect plant and/or animal species in the district. The 2009 CAP control measures typically affect existing commercial or industrial facilities and reduce emissions from mobile sources, increase energy efficiency, as well as measures to minimize emissions from indirect sources. Existing commercial or industrial facilities are generally located in appropriately zoned commercial or industrial areas, which typically do not support candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Similarly, modifications at existing facilities would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with native or resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Further, since the proposed

2009 CAP primarily regulates stationary emission sources at existing and new commercial or industrial facilities, it does not directly or indirectly affect local agency land use policy that may adversely affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or identified by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Improving air quality is expected to provide health and welfare benefits to plant and animal species in the Bay Area. There are no control measures contained in the 2009 CAP that would alter this determination.

**IV. c):** As noted in the previous item, proposed control measures in the 2009 CAP may require modifications at existing industrial or commercial facilities to control or further control emissions, reduce mobile source emissions, increase energy efficiency, and reduce emissions from land use decisions. Some control measures could result in the installation of additional controls at industrial or commercial facilities. The installation of air pollution control equipment at these facilities would be consistent with commercial/industrial land uses. For these reasons the proposed project will not adversely affect protected wetlands as defined by §404 of the Clean Water Act, including, but not limited to marshes, vernal pools, coastal wetlands, etc., through direct removal, filling, hydrological interruption or other means.

**IV. e), f):** Implementing the proposed 2009 CAP is not expected to adversely effect land use plans, local policies or ordinances, or regulations protecting biological resources such as a tree preservation policy or ordinance for the reasons already given, i.e. control measures promulgated as rules or regulations primarily affect existing facilities located in appropriately zoned areas, reduce emissions from mobile sources, and reduce emissions from land use decisions. Land use and other planning considerations are determined by local governments and land use or planning requirements are not expected to be altered by the proposed project. Similarly, the proposed 2009 CAP is not expected to affect in any way habitat conservation or natural community conservation plans, agricultural resources or operations, and would not create divisions in any existing communities.

The Indirect Source Review (LUM 1) and Land Use Guidelines Measures (LUM 5) would attempt to influence land uses associated with new development to minimize air emissions. Development itself has the potential for biological impacts, however, the Indirect Source Control and Land Use Guidelines Measures could influence land uses, for example affecting the number of units, or encouraging bike lanes or pedestrian improvements, or require the payment of fees. Therefore, these measures are not expected to result in modifications to new development that would generate significant biological impacts. The biological impacts of new development will be evaluated on a case-by-case basis by the local lead agency and are generally subject to CEQA requirements. Any potential impacts can be mitigated by the local land use agency using General Plan and habitat conservation guidance.

The 2009 CAP includes the Tree Planting (ECM 4) Measure that would encourage additional tree planting. The trees are expected to be planted in urban areas as part of landscaped vegetation and are not expected to displace any native habitat or conflict with



local policies. Rather the control measure is expected to encourage local tree policies to include the use of additional trees to provide landscaping that shades urban development, resulting in cooler temperatures and less energy used for cooling. Improving air quality is expected to provide health and welfare benefits to plant and animal species in the district.

## Conclusion

Based upon the above considerations, significant adverse project-specific biological resources impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## V. CULTURAL RESOURCES.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural and open

space uses. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for millennia given their abundant combination of littoral and oak woodland resources.

## Discussion of Impacts

**V. a) - d):** CEQA Guidelines state that “generally, a resource shall be considered ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- B) Is associated with the lives of persons important in our past;
- C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- D) Has yielded or may be likely to yield information important in prehistory or history” (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of Historic Places unless they can be shown to be exceptionally important. Implementing the proposed 2009 CAP is primarily expected to result in controlling stationary source emissions at existing commercial or industrial facilities, reducing emissions from mobile sources, and reducing emissions from land use decisions. Affected facilities where physical modifications may occur are typically located in appropriately zoned commercial or industrial areas that have previously been disturbed. Because potentially affected facilities are existing facilities and controlling stationary source emissions does not typically require extensive cut-and-fill activities or excavation, it is unlikely that implementing control measures in the proposed 2009 CAP will: adversely affect historical or archaeological resources as defined in CEQA Guidelines §15064.5, destroy unique paleontological resources or unique geologic features, or disturb human remains interred outside formal cemeteries.

Implementing control measures in the proposed 2009 CAP may require minor site preparation and grading at an affected facility. Additional development would not be expected to uncover cultural resources in already developed and urbanized areas

including existing industrial and commercial facilities that may be affected by the stationary source control measures. If archaeological or paleontological resources are uncovered, significant adverse cultural resources impacts are not anticipated because there are existing laws in place that are designed to protect and mitigate potential adverse impacts to cultural resources. As with any construction activity, should archaeological resources be found during construction that results from implementing the proposed control measures, the activity would cease until a thorough archaeological assessment is conducted.

Land Use and Local Impact Measures in the 2009 CAP may require emission reductions from new or redevelopment land use projects (LUM 1 and LUM 4). These control measures, however, do not initiate or promote land use projects, they may simply require emission reductions after the decision has already been made to pursue new or redevelopment projects. As a result, Land Use and Local Impact Measures are not expected to adversely affect local land use policies or create additional development that would impact cultural resources.

### Conclusion

Based upon the above considerations, significant adverse project-specific cultural resources impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## VI. GEOLOGY AND SOILS.

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| • Strong seismic ground shaking?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
• Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Setting

The Bay Area is located in the natural region of California known as the Coast Ranges geomorphic province. The province is characterized by a series of northwest trending ridges and valleys controlled by tectonic folding and faulting, examples of which include the Suisun Bay, East Bay Hills, Briones Hills, Vaca Mountains, Napa Valley, and Diablo Ranges.

Regional basement rocks consist of the highly deformed Great Valley Sequence, which include massive beds of sandstone inter-fingered with siltstone and shale. Unconsolidated alluvial deposits, artificial fill, and estuarine deposits, (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The estuarine sediments found along the shorelines of Solano County are soft, water-saturated mud, peat and loose sands. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility

and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along “active” faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). In the Bay area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

## Discussion of Impacts

**VI. a), c) and d):** The proposed 2009 CAP will not directly or indirectly expose people or structures to earthquake faults, seismic shaking, seismic-related ground failure including liquefaction, landslides, mudslides or substantial soil erosion for the following reasons. When implemented as rules or regulations, control measures do not directly or indirectly result in construction of new structures. Some structural modifications, however, at existing affected facilities may occur as a result of installing control equipment or making process modifications. In any event, existing affected facilities or modifications to existing facilities would be required to comply with relevant California Building Code requirements in effect at the time of initial construction or modification of a structure.

New structures must be designed to comply with the California Building Code seismic zone requirements since the district is located in a seismically active area. The local cities or counties are responsible for assuring that projects comply with the California Building Code as part of the issuance of the building permits and can conduct inspections to ensure compliance. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the Code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some non-structural damage; and (3) resist major earthquakes without collapse but with some structural and non-structural damage.

The California Building Code bases seismic design on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation conditions at the site.

Any potentially affected facilities that are located in areas where there has been historic occurrence of liquefaction, e.g., coastal zones, or existing conditions indicate a potential for liquefaction, including expansive or unconsolidated granular soils and a high water table, may have the potential for liquefaction-induced impacts at the project sites. The California Building Code requirements consider liquefaction potential and establish more stringent requirements for building foundations in areas potentially subject to liquefaction. Therefore, compliance with the California Building Code requirements is expected to minimize the potential impacts associated with liquefaction. The issuance of building permits from the local cities or counties will assure compliance with the California Building Code requirements. Therefore, no significant impacts from liquefaction are expected and this potential impact will not be considered further.

Because facilities affected by any 2009 CAP control measures are typically located in industrial or commercial areas, which are not typically located near known geological hazards (e.g., landslide, mudflow, seiche, tsunami or volcanic hazards), no significant adverse geological impacts are expected. Tsunamis at the facilities near the water or within the ports are not expected because the San Francisco Bay is largely protected from wave action. 2009 CAP control measures will not locate sources closer to hazards such as water or increase potential exposures to tsunamis. As a result, these topics will not be further evaluated in the Draft PEIR.

**VI. b):** Although the proposed 2009 CAP control measures may require modifications at existing industrial or commercial facilities to control or further control emissions, reduce mobile source emissions, increase energy efficiency, and reduce emissions from land use decisions, such modifications are not expected to require substantial grading, construction activities, or paving of unpaved areas. The proposed project does not have the potential to substantially increase the area subject to compaction or overcovering since the subject areas would be limited in size and, typically, have already been graded or displaced in some way (e.g., additional structures at industrial or commercial areas). Therefore, significant adverse soil erosion impacts are not anticipated from implementing the 2009 CAP and will not be further analyzed in the Draft PEIR.

**VI. e):** Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. The proposed 2009 CAP does not contain any control measures that generate construction of residential projects in remote areas. The proposed control measures typically affect existing industrial or commercial facilities that are already connected to appropriate wastewater facilities.

Based on these considerations, the use of septic tanks or other alternative wastewater disposal systems will not be further evaluated in the Draft PEIR.

## Conclusion

Based upon the above considerations, significant adverse project-specific impacts to geology and soils are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- |    |   |                                     |                          |                                     |                                     |
|----|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| e) | Be located within an airport land use plan or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) | Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| h) | Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?                       | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) | Significantly increased fire hazard in areas with flammable materials?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
- 

## Setting

Hazards are related to the risks of fire, explosions, or releases of hazardous substances in the event of accident or upset conditions. Hazards are related to the production, use, storage, and transport of hazardous materials. Industrial production and processing facilities are potential sites for hazardous materials. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production processes. Examples of hazardous materials used by consumers include fuels, paints, paint thinner, nail polish, and solvents. Hazardous materials may be stored at facilities producing such materials and at facilities where hazardous materials are part of the production processes. Currently, hazardous materials are transported throughout the Bay Area in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.



The potential hazards associated with handling such materials are a function of the materials being processed, processing systems, and procedures used to operate and maintain the facilities where they exist. The hazards that are likely to exist are identified by the physical and chemical properties of the materials being handled and their process conditions, including fires, vapor cloud explosions, thermal radiation, and explosion/overpressure.

## Discussion of Impacts

**VII. a) - b):** The proposed 2009 CAP has the potential to create direct or indirect hazard impacts in several ways. Some control measures that would regulate VOC emissions by establishing VOC content requirements for products such as digital printing (SSM 3) may result in reformulating these products with materials that are low or exempt VOC materials. It is possible that such reformulated products could have hazardous physical or chemical properties, which could create hazard impacts through the routine transport or disposal of these materials or through upset conditions involving the accidental release of these materials into the environment. Greater use of alternative clean fuels (e.g., alternative fuels in MSM A-2, MSM A-3, MSM B-1, MSM C-1 and LUM 4 and biodiesel in MSM B-5) could also create hazard impacts in the event of an accidental release of these materials into the environment. The use of alternative fuels could also be encouraged in other control measures (e.g., LUM 1, LUM 2, LUM 3, and LUM 5). Further, the NO<sub>x</sub> reduction control measures could result in the increased use of ammonia in selective catalytic reduction (SCR) units. These potential hazard impacts will be further evaluated in the Draft PEIR.

**VII. c):** The 2009 CAP may involve the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. These potential hazard impacts will be further evaluated in the Draft PEIR. Impacts related to public exposure to toxic air contaminants will be addressed in the "Air Quality" section of the Draft PEIR. The 2009 CAP also includes Control Measure LUM 3, which would establish a system to track cumulative health risks associated with permitted stationary sources in impacted communities and could result in additional air pollution control and a reduction in health risk in impacted communities, including near sensitive receptors.

**VII. d):** Government Code §65962.5 requires creation of lists of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities. For any facilities affected by the 2009 CAP proposed control measures, it is anticipated that they would be required to manage any and all hazardous materials in accordance with federal, state and local regulations. Control measures are not expected to interfere with site cleanup activities or create additional site contamination. Therefore, this topic is less than significant and will not be further evaluated in the Draft PEIR.

**VII. e) and f):** The proposed project will not adversely affect any airport land use plan or result in any safety hazard for people residing or working in the district. U.S.

Department of Transportation – Federal Aviation Administration Advisory Circular AC 70/7460-2K provides information regarding the types of projects that may affect navigable airspace. Projects that involve construction or alteration of structures greater than 200 feet above ground level within a specified distance from the nearest runway; objects within 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each one foot vertically from the nearest point of the runway); etc., may adversely affect navigable airspace. Control measures in the proposed 2009 CAP are not expected to require construction of tall structures near airports so potential impacts to airport land use plans or safety hazards to people residing or working in the vicinity of local airports are not anticipated. Control measures could result in additional controls of equipment at or near airports. These controls may establish emission standards or increase the use of electrical equipment, but are not expected to interfere with airport activities. This potential impact will not be further addressed in the Draft PEIR.

**VII. g):** The proposed project will not impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. Operators of any existing commercial or industrial facilities affected by proposed 2009 CAP control measures will typically have their own emergency response plans for their facilities already in place. Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public, but the facility employees as well. The implementation of certain control measures could result in the need for additional storage of hazardous materials (e.g., ammonia). Such modifications may require revisions to emergency response plans if new hazardous materials are introduced to a facility. However, these modifications would not be expected to interfere with emergency response procedures. Adopting the proposed 2009 CAP is not expected to interfere with any emergency response procedures or evacuation plans and, therefore, will not be further evaluated in the Draft PEIR.

**VII. h):** The proposed 2009 CAP would typically affect existing commercial or industrial facilities in appropriately zoned areas, reduce mobile source emissions, increase energy efficiency, and reduce emissions from land use decisions. Since commercial and industrial areas are not typically located near wildland or forested areas, implementing the proposed control measures has no potential to increase the risk of wildland fires in these areas. The proposed 2009 CAP does not require construction of structures for new land uses in any areas of the district and, therefore, is not expected to create additional development in areas subject to wildland fires. There are no provisions of the proposed project that would directly affect existing land use plans, policies, or regulations. This topic will not be further evaluated in the Draft PEIR.

**VII. i):** The 2009 CAP may contain some control measures that require add-on control equipment or reformulated products that may increase potential fire hazards in areas with flammable materials. The potential for increased probability of explosion, fire, or other hazards will be addressed in the Draft PEIR.

## Conclusion

Based upon the above considerations, the potentially adverse significant hazard impacts due to the increased probability of explosion, fire, or other risk of upset occurrences associated with the 2009 CAP will be addressed in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## VIII. HYDROLOGY AND WATER QUALITY.

Would the project:

- |   |                                     |                          |                                     |                          |
|---|-------------------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- |    |   |                                     |                          |                                     |                                     |
|----|---|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| d) | Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite? | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) | Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f) | Otherwise substantially degrade water quality?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| g) | Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h) | Place within a 100-year flood hazard area structures that would impede or redirect flood flows?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| i) | Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?   | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| j) | Inundation by seiche, tsunami, or mudflow?  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Reservoirs

and drainage streams are located throughout the area and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The Bay Area is located within the San Francisco Bay Area Hydrologic Basin. The primary regional groundwater water-bearing formations include the recent and Pleistocene (up to two million years old) alluvial deposits and the Pleistocene Huichica formation. Salinity within the unconfined alluvium appears to increase with depth to at least 300 feet. Water of the Huichica formation tends to be soft and relatively high in bicarbonate, although usable for domestic and irrigation needs.

## Discussion of Impacts

**VIII. a) and f):** The proposed 2009 CAP control measures may require modifications at existing industrial or commercial facilities. Control measures that would control particulate and/or SOx emissions could require additional water use and wastewater discharge from devices like wet gas scrubbers (e.g., SSM 4 and SSM 9).

To reduce VOC emissions, one proposed control measure (SSM 3) may involve reformulating inks used in digital printing with low VOC or exempt solvents. Under this circumstance, it is not expected that there will be a substantial increase in the volume of wastewater generated by affected facilities, but there could be a slight change in the nature and toxicity of wastewater effluent. The stationary source measures may generate potentially significant adverse water quality impacts from add-on air pollution control equipment such as wet scrubbers, alternative transportation fuels, and reformulated low-VOC consumer products.

It is assumed that any affected facilities that generate wastewater and are subject to waste discharge or pretreatment requirements currently comply with and will continue to comply with all relevant wastewater requirements, waste discharge regulations and standards for stormwater runoff, and any other relevant requirements for direct discharges into sewer systems. These standards and permits require water quality monitoring and reporting for onsite water-related activities. Should the volume or discharge limits change as a result of implementing control measures, the facility would be required to consult with the appropriate regional water quality control board and/or the local sanitation district to discuss these changes. Nonetheless, implementing the 2009 CAP may generate additional wastewater that could impact water quality standards or waste discharge requirements. Therefore, this topic will be evaluated further in the Draft PEIR.

**VIII. b):** As discussed above, control measures that would control particulate and/or SOx emissions could require additional water use and wastewater discharge from affected facilities. The proposed project contains control measures that would generally allow for a number of different control technologies, some of which could require an increase in water usage at affected facilities (e.g., wet gas scrubbers). Thus, implementing the proposed project could require additional water, some of which could come from

ground water supplies. This topic is potentially significant and will be evaluated further in the Draft PEIR.

**VIII. c), d), and e):** The proposed 2009 CAP generally is expected to impose control requirements on stationary sources at existing commercial and industrial facilities, reduce emissions from mobile sources, and reduce emissions from land use decisions. The proposed project does not have the potential to substantially increase the area subject to runoff since the subject areas would be limited in size and, typically, have already been graded or displaced in some way (e.g., existing industrial or commercial facilities).

CAP control measures would not be expected to generate in and of themselves new structures that could alter existing drainage patterns by altering the course of a river or stream that would result in substantial erosion, siltation, or flooding on or offsite, increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems, etc. Although minor modifications might occur at commercial or industrial facilities affected by the proposed 2009 CAP control measures, these facilities have, typically, already been graded and the areas surrounding them have likely already been paved over or landscaped. As a result, further minor modifications at affected facilities that may occur as a result of implementing the 2009 CAP control measures are not expected to alter in any way existing drainage patterns or stormwater runoff. Since this potential adverse impact is not considered to be significant, it will not be further evaluated in the Draft PEIR.

**VIII. g), h), i), and j):** The proposed project does not include the construction of new or relocation of existing housing or other types of facilities and, as such, would not require the placement of housing or other structures within a 100-year flood hazard area. (See also XII "Population and Housing"). As a result, the proposed project would not be expected to create or substantially increase risks from flooding; expose people or structures to significant risk of loss, injury or death involving flooding; or increase existing risks, if any, of inundation by seiche, tsunami, or mudflow. Consequently, this topic will not be evaluated further in the Draft PEIR.

## **Conclusion**

Implementing the proposed 2009 CAP control measures could result in increased water demand and wastewater generation that could result in potentially significant adverse impacts. Consequently, these impacts will be addressed in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX. LAND USE AND PLANNING.</b>				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The 2009 CAP control measures generally affect stationary sources that are located in industrial and commercial areas throughout the jurisdiction of the BAAQMD. Some control measures (e.g., LUM 1 and LUM 5) may also affect most types of development projects.

## Discussion of Impacts

**IX. a) and c):** The proposed 2009 CAP generally is expected to impose control requirements on stationary sources at existing commercial or industrial facilities, reduce emissions from mobile sources, increase energy efficiency, and reduce emissions from land use decisions. As a result, the proposed 2009 CAP does not require construction of structures for new land uses in any areas of the district and, therefore, is not expected to

create divisions in any existing communities or conflict with any applicable habitat conservation or natural community conservation plans.

**IX. b):** Any facilities affected by the proposed 2009 CAP would still be expected to comply with, and not interfere with, any applicable land use plans, zoning ordinances, habitat conservation or natural community conservation plans. There are no provisions of the proposed project that would directly affect these plans, policies, or regulations. Air districts are specifically excluded from infringing on existing city or county land use authority (California Health & Safety Code §40414). Land use and other planning considerations are determined by local governments and no present or planned land uses in the region or planning requirements will be altered by the 2009 CAP. There are existing links between population growth, land development, housing, traffic, and air quality. The Metropolitan Transportation Commission's (MTC) Transportation 2035 Plan accounts for these links when designing ways to improve air quality, transportation systems, land use compatibility, and housing opportunities in the region. Land use planning is handled at the local level and contributes to development of the CAP growth projections, for example, but the CAP does not affect local government land use planning decisions. The proposed 2009 CAP complements existing regional planning activities in the Bay Area.

The Tree Planting Measure (ECM 4) would encourage the planting of additional trees. A large-scale planting program has the potential to conflict with local plans and ordinances. Under this control measure it is expected that ordinances would be revised or developed to encourage additional tree planting and to require planting with certain specific types of trees. Streetscapes, landscapes, setbacks, and corridor plans are expected to be revised or developed to allow room for additional tree planting. Therefore, the control measure may encourage additional tree planting but no significant impacts to land use policies are expected.

Land Use and Local Impact Control Measures (e.g., LUM 1 and LUM 5) would attempt to influence land uses associated with new development to minimize air emissions. Development itself has the potential for land use impacts, however, these Control Measures would attempt to influence land uses, for example affecting the number of units, or encouraging bike lanes or pedestrian improvements, or require the payment of fees, or other similar controls, some of which could reduce potential land use impacts. Therefore, the Indirect Source Control and Land Use Guidelines Measures are not expected to result in modifications to new development that would generate significant land use impacts. The land use impacts of new development will be evaluated on a case-by-case basis and are generally subject to CEQA requirements and can be mitigated by the local land use agency using General or Specific Plan guidance.

## **Conclusion**

Based upon the above considerations, significant adverse project-specific land use and planning impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.



	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## X. MINERAL RESOURCES.

Would the project:

- |    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area.

## Discussion of Impacts

**X. a), b):** There are no provisions of the proposed project that would directly result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The proposed 2009 CAP is not expected to deplete non-renewable mineral resources, such as aggregate materials, metal ores, etc., at an accelerated rate or in a wasteful manner because CAP control measures are typically not mineral resource intensive measures. Therefore, significant adverse impacts to mineral resources are not anticipated.

## Conclusion

Based upon the above considerations, significant adverse project-specific impacts to mineral resources are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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**XI. NOISE.**

Would the project:

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) | Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) | Expose persons to or generate of excessive groundborne vibration or groundborne noise levels?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) | Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d) | Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) | Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) | Be located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area. The 2009 CAP control measures generally affect stationary sources that are located in industrial and commercial areas throughout the jurisdiction of the BAAQMD. Some control measures (e.g., LUM 1 and LUM 5) may also affect most types of development projects.

## Discussion of Impacts

**XI. a), b), c), d):** The proposed project may require existing commercial or industrial owners/operators of affected facilities to install air pollution control equipment or modify their operations to reduce stationary source emissions. Potential modifications will occur at facilities typically located in appropriately zoned industrial or commercial areas. The 2009 CAP could require additional control equipment that could generate noise impacts, but virtually all of the control equipment would be installed at industrial and commercial facilities.

Ambient noise levels in commercial and industrial areas are typically driven primarily by freeway and/or highway traffic in the area and any heavy-duty equipment used for materials manufacturing or processing at nearby facilities. It is not expected that any modifications to install air pollution control equipment would substantially increase ambient (operational) noise levels in the area, either permanently or intermittently, or expose people to excessive noise levels that would be noticeable above and beyond existing ambient levels. It is not expected that affected facilities would exceed noise standards established in local general plans, noise elements, or noise ordinances currently in effect. Affected facilities would be required to comply with local noise ordinances and elements, which may require construction of noise barriers or other noise control devices.

Some control measures will provide an incentive for the early retirement of older equipment, replacing it with newer technologies (e.g., SSM 13, SSM 14, SSM 17, SSM 18, SSM 19, MSM A-1, MSM A-2, MSM A-4, MBM B-1, MSM C-1, and MSM C-3). In most cases, newer equipment and newer engines are more efficient and generate less noise than older equipment. For example, electric and hybrid vehicles generate less noise than standard gasoline fueled vehicles. Therefore, some control measures could result in noise reductions at industrial/commercial facilities or along freeways/highways/streets as a result of quieter engines. In addition, some of the control measures (LUM 1, LUM2, and LUM 5) would result in a reduction in vehicle miles traveled, potentially reducing noise from mobile sources within the Bay Area.

Construction activities at industrial/commercial facilities could also generate noise impacts. However, those construction activities (e.g., paving activities) would be required to comply with local noise ordinances, which generally prohibit construction during the nighttime, in order to minimize noise impacts. Compliance with the local noise ordinances is expected to minimize noise impacts associated with construction activities to less than significant.

It is also not anticipated that the proposed project will cause an increase in ground borne vibration levels because air pollution control equipment is not typically vibration intensive equipment. Consequently, the 2009 CAP will not directly or indirectly cause substantial noise or excessive ground borne vibration impacts. These topics, therefore, will not be further evaluated in the Draft PEIR.

**XI. e) and f):** Affected facilities would still be expected to comply, and not interfere, with any applicable airport land use plans and disclose any excessive noise levels to affected residences and workers pursuant to existing rules, regulations and requirements, such as CEQA. It is assumed that operations in areas near airports are subject to and in compliance with existing community noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements. In addition to noise generated by current operations, noise sources in each area may include nearby freeways, truck traffic to adjacent businesses, and operational noise from adjacent businesses. None of the proposed control measures in the 2009 CAP would locate residents or commercial buildings or other sensitive noise sources closer to airport operations. As noted in the previous item, there are no components of the proposed 2009 CAP that would substantially increase ambient noise levels, either intermittently or permanently.

## **Conclusion**

Based upon the above considerations, significant adverse project-specific noise impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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## XII. POPULATION AND HOUSING.

Would the project:

- |    |  |                          |                          |                          |                                     |
|----|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) | Induce substantial population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) | Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that land uses and the affected environment vary greatly throughout the area.

## Discussion of Impacts

**XII. a):** According to the Association of Bay Area Governments (ABAG), population in the Bay Area is currently about seven million people and is expected to grow to about nine million people by 2035 (ABAG, 2006). The proposed project is not anticipated to generate any significant effects, either directly or indirectly, on the Bay Area's population or population distribution. The proposed 2009 CAP generally affects existing commercial or industrial facilities located in predominantly industrial or commercial urbanized areas throughout the district. It is expected that the existing labor pool within the areas surrounding any affected facilities would accommodate the labor requirements for any modifications at affected facilities. In addition, it is not expected that affected

facilities will be required to hire additional personnel to operate and maintain new control equipment on site because air pollution control equipment is typically not labor intensive equipment. In the event that new employees are hired, it is expected that the existing local labor pool in the District can accommodate any increase in demand for workers that might occur as a result of adopting the proposed 2009 CAP. As such, adopting the proposed 2009 CAP is not expected to induce substantial population growth.

**XII. b) and c):** The proposed 2009 CAP is not expected to increase the demand for new workers in the area. Any demand for new employees is expected to be accommodated from the existing labor pool so no substantial population displacement is expected. Construction activities generated by the 2009 CAP are expected to be limited to stationary sources within industrial and commercial areas for the installation of new technology or equipment. The 2009 CAP is not expected to require construction activities that would displace people or existing housing.

### Conclusion

Based upon the above considerations, significant adverse project-specific population and housing impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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### XIII. PUBLIC SERVICES.

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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## Setting

Given the large area covered by the BAAQMD (about 5,600 square miles), public services are provided by a wide variety of local agencies. Fire protection and police protection/law enforcement services within the BAAQMD are provided by various districts, organizations, and agencies. There are several school districts, private schools, and park departments within the BAAQMD. Public facilities within the BAAQMD are managed by different county, city, and special-use districts. City and/or County General Plans usually contain goals and policies to assure adequate public services are maintained within the local jurisdiction.

## Discussion of Impacts

**XIII. a):** There is no potential for significant adverse public service impacts as a result of adopting the proposed 2009 CAP. The 2005 Ozone Strategy PEIR analyzed potential adverse impacts to public services as a result of implementing CAP control measures and concluded that existing resources at services such as fire departments, police departments and local governments would not be significantly adversely affected as a result of implementing CAP control measures. The proposed project would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times or other performance objectives. Similarly, most industrial facilities have on-site security that controls public access to facilities so no increase in the need for police services are expected. Most industrial facilities have on-site fire protection personnel and/or have agreements for fire protection services with local fire departments. For these reasons, implementing the 2009 CAP is not expected to require additional fire protection services.

Adopting the proposed 2009 CAP is not expected to induce population growth. Thus, implementing the proposed control measures would not increase or otherwise alter the demand for schools and parks in the district. No significant adverse impacts to schools or parks are foreseen as a result of adopting the proposed 2009 CAP.

Land Use and Local Impact Measures would affect land uses associated with new developments or redevelopment projects in order to minimize emissions. Development itself has the potential for impacts on public services; however, the proposed control measures do not drive land use development, but may impose emission reduction requirements after the decision is already made to go forward with new or redevelopment projects. Land Use and Local Impact Measures are not expected to result in modifications to new development that would generate significant impacts on public services. The public services impacts of new development will be evaluated on a case-by-case basis by the local land use agency (city or county) and are generally subject to CEQA requirements and can be mitigated by the local

land use agency using General or Specific Plan guidance. No significant adverse impacts to schools or parks are foreseen as a result of adopting the proposed 2009 CAP.

## Conclusion

Based upon the above considerations, significant adverse project-specific public services impacts are not expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## XIV. RECREATION.

Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles) so that there are numerous areas for recreational activities. Recreational areas are generally protected and regulated by the City and/or County General Plans at the local level through land use and zoning requirements. Some parks and recreation areas are designated and protected by state and federal regulations.



## Discussion of Impacts

**XIV. a) and b):** As discussed under “Land Use and Planning” and “Population and Housing” above, there are no provisions of the proposed project that would affect land use plans, policies, ordinances, or regulations. Land use and other planning considerations are determined by local governments. No land use or planning requirements, including those related to recreational facilities, will be altered by the proposal. The proposed project does not have the potential to directly or indirectly induce population growth or redistribution. As a result, the proposed project would not increase the use of, or demand for existing neighborhood and/or regional parks or other recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

### Conclusion

Based upon the above considerations, no significant adverse project-specific impacts to population and housing are expected to occur due to implementation of the 2009 CAP and, therefore, will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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## XV. TRANSPORTATION/TRAFFIC.

Would the project:

- |    |   |                          |                          |                                     |                          |
|----|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) | Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) | Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- |    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| c) | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) | Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e) | Result in inadequate emergency access?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) | Result in inadequate parking capacity?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) | Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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## Setting

Transportation systems located within the Bay Area include railroads, airports, waterways, and highways. The Port of Oakland and three international airports in the area serve as hubs for commerce and transportation. The transportation infrastructure for vehicles and trucks in the Bay Area ranges from single lane roadways to multilane interstate highways. The Bay Area contains over 19,600 miles of local streets and roads, and over 1,400 miles of state highways. In addition, there are over 9,040 transit route miles of services including rapid rail, light rail, commuter, diesel and electric buses, cable cars, and ferries. The Bay Area also has an extensive local system of bicycle routes and pedestrian paths and sidewalks.

The region is served by numerous interstate and U.S. freeways. On the west side of San Francisco Bay, Interstate 280 and U.S. 101 run north-south. U.S. 101 continues north of San Francisco into Marin County. Interstates 880 and 660 run north-south on the east side of the Bay. Interstate 80 starts in San Francisco, crosses the Bay Bridge, and runs northeast toward Sacramento. Interstate 80 is a six-lane north-south freeway which connects Contra Costa County to Solano County via the Carquinez Bridge. State Routes 29 and 84, both highways that allow at-grade crossings in certain parts of the region, become freeways that run east-west, and cross the Bay. Interstate 580 starts in San

Rafael, crosses the Richmond-San Rafael Bridge, joins with Interstate 80, runs through Oakland, and then runs eastward toward Livermore. From the Benicia-Martinez Bridge, Interstate 680 extends north to Interstate 80 in Cordelia. Caltrans constructed a second freeway bridge adjacent and east of the existing Benicia-Martinez Bridge. The new bridge consists of five northbound traffic lanes. The existing bridge was re-stripped to accommodate four lanes for southbound traffic. Interstate 780 is a four lane, east-west freeway extending from the Benicia-Martinez Bridge west to I-80 in Vallejo.

## Discussion of Impacts

**XV. a), and b):** Adopting the proposed 2009 CAP is not expected to substantially increase vehicle trips or vehicle miles traveled in the district. The 2009 CAP includes transportation and related control measures that may result in a decrease in vehicle miles traveled including the Land Use and Local Impacts Measures (LUM 1, LUM 4, and LUM 5). The 2009 CAP also relies on transportation control measures adopted as part of the Transportation 2035 Plan by MTC (MTC, 2009). These transportation control measures include strategies to enhance mobility by improving bus service (TCM A-1); improving rail service (TCM A-2); improving ferry service (TCM A-3); improving the efficiency of freeways and arterial systems (TCM B-1); improving transit efficiency and use (TCM B-2); improving the express lane network (TCM B-3); improving the movement of goods and reduce diesel emissions (TCM B-4); and strategies to reduce vehicle miles traveled (TCM C-1, TCM C-3, TCM C-4, TCM D-1, TCM D-2, TCM D-3, TCM E-1, and TCM E-2). Specific strategies that serve to reduce vehicle trips and vehicle miles traveled, such as strategies resulting in greater reliance on mass transit, ridesharing, telecommunications, etc., are expected to result in reducing traffic congestion. Although population in the district will continue to increase, implementing the transportation control measures (in conjunction with the Regional Transportation Plan) will ultimately result in greater percentages of the population using transportation modes other than single occupant vehicles. As a result, relative to population growth, existing traffic loads and the level of service designation for intersections district-wide would not be expected to degrade at current rates, but could possibly improve to a certain extent. Therefore, implementing the 2009 CAP could ultimately provide transportation improvements and congestion reduction benefits.

**XV. c):** Neither air traffic nor air traffic patterns are expected to be directly or indirectly affected by adopting the proposed 2009 CAP. Controlling emissions at existing commercial or industrial facilities, reducing emissions from mobile sources, increasing energy efficiency, and reducing emissions from land use decisions do not require constructing any structures that could impede air traffic patterns in any way.

**XV. d):** It is not expected that adopting the proposed 2009 CAP will directly or indirectly increase roadway design hazards or incompatible risks. The transportation control measures included in the 2009 CAP are not expected to require construction of new roadways. To the extent that implementing components of the Transportation 2035 Plan approved by the MTC (transportation control measures and related measures) would

require further development of roadway infrastructure, it is expected that there would ultimately be a reduction in roadway hazards or incompatible risks as part of any roadway infrastructure improvements and reduced congestion.

**XV. e):** Controlling emissions at existing commercial or industrial facilities, reducing emissions from mobile sources, increasing energy efficiency, and reducing emissions from land use decisions are not expected to affect in any way emergency access routes at any affected commercial or industrial facilities. The reason for this conclusion is that controlling emissions (from stationary sources in particular) is not expected to require construction of any structures that might obstruct emergency access routes at any affected facilities. A potential benefit of the 2009 CAP is that reduced congestion could lead to better emergency access.

**XV. f):** Several measures in the 2009 CAP could impact parking by developing parking management strategies and increased parking prices to encourage alternative transportation modes to passenger vehicles (TCM D-3, TCM E-2, and LUM 1). These measures could lead to a reduced number of parking spaces and increased cost of parking. At the same time, the control measures are also seeking to encourage the use of alternative transportation modes, including bus and light rail, as well as car-sharing and bike-sharing programs (TCM E-2). The 2009 CAP is not expected to result in inadequate parking at any affected facilities in the district. The reason for this conclusion is that, to the extent that transportation and related control measures reduce or limit the growth in daily vehicle trips, there could be a reduction in current or future demand for parking compared to existing levels of parking demand.

**XV. g):** Adopting the proposed 2009 CAP will not conflict with adopted policies, plans or programs supporting alternative transportation programs. In fact, the transportation and related control measures would specifically encourage and provide incentives for implementing alternative transportation programs and strategies.

## **Conclusion**

Adopting the proposed 2009 CAP is not expected to generate any significant adverse project-specific impacts to transportation or traffic systems, so this topic will not be further evaluated in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
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## XVI. UTILITIES AND SERVICE SYSTEMS.

Would the project:

- |    |  |                                     |                          |                                     |                                     |
|----|--|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b) | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c) | Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                                     | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) | Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) | Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g) Comply with federal, state, and local statutes and regulations related to solid waste?                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
- 

## Setting

Given the large area covered by the BAAQMD, public utilities are provided by a wide variety of local agencies. The most affected facilities have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of National Pollutant Discharge Elimination System (NPDES) permits.

Water is supplied to affected facilities by several water purveyors in the Bay Area. Solid waste is handled through a variety of municipalities, through recycling activities and at disposal sites.

There are no hazardous waste disposal sites within the jurisdiction of the BAAQMD. Hazardous waste generated in the Bay Area, which is not recycled off-site, is required to be disposed of at a licensed hazardous waste disposal facility. Two such facilities are the Chemical Waste Management Inc. (CWMI) Kettleman Hills facility in King's County, and the Safety-Kleen facility in Buttonwillow (Kern County). Hazardous waste can also be transported to permitted facilities outside of California. The nearest out-of-state landfills are U.S. Ecology, Inc., located in Beatty, Nevada; USPCI, Inc., in Murray, Utah; and EnviroSAFE Services of Idaho, Inc., in Mountain Home, Idaho. Incineration is provided at the following out-of-state facilities: Aptus, located in Aragonite, Utah and Coffeyville, Kansas; Rollins Environmental Services, Inc., located in Deer Park, Texas and Baton Rouge, Louisiana; Chemical Waste Management, Inc., in Port Arthur, Texas; and Waste Research & Reclamation Co., Eau Claire, Wisconsin.

City and/or County General Plans usually contain goals and policies to assure adequate utilities and service systems are maintained within the local jurisdiction.

## Discussion of Impacts

**XVI. a) and e):** As discussed in Hydrology/Water Quality (VIII a) above, the proposed 2009 CAP control measures may require modifications at existing industrial or commercial facilities. Control measures that would control particulate and/or SO<sub>x</sub> emissions (e.g., SSM 4 and SSM 9) could require additional water use and wastewater discharge from devices like wet gas scrubbers (e.g., particulate matter control in SSM 4).

The stationary source measures may generate potentially significant adverse water quality impacts from add-on air pollution control equipment such as wet scrubbers, alternative transportation fuels, and reformulated low-VOC coatings.

It is assumed that any affected facilities that generate wastewater and are subject to waste discharge or pretreatment requirements currently comply with and will continue to comply with all relevant wastewater requirements, waste discharge regulations and standards for stormwater runoff, and any other relevant requirements for direct discharges into sewer systems. These standards and permits require water quality monitoring and reporting for onsite water-related activities. Should the volume or discharge limits change as a result of implementing control measures, the facility would be required to consult with the appropriate regional water quality control board and/or the local sanitation district to discuss these changes. Nonetheless, implementing the 2009 CAP may generate additional wastewater that could impact water quality standards or waste discharge requirements. Therefore, this topic will be evaluated further in the Draft PEIR.

**XVI. b) and d):** As discussed in Hydrology and Water Quality (VIII. b), control measures that would control particulate and/or SO<sub>x</sub> emissions (e.g., SSM 4 and SSM 9) could require additional water use and wastewater discharge from affected facilities. The proposed project contains control measures that would generally allow for a number of different control technologies, some of which could require an increase in water usage at affected facilities (e.g., wet gas scrubbers). Thus, implementing the proposed project would require additional water. This topic is potentially significant and will be evaluated further in the Draft PEIR.

**XVI. c):** As discussed in Hydrology and Water Quality (VIII. c), the proposed project does not have the potential to substantially increase the area subject to runoff since the subject areas would be limited in size and, typically, have already been graded or displaced in some way (e.g., existing industrial or commercial facilities). Although minor modifications might occur at commercial or industrial facilities affected by the proposed 2009 CAP control measures, these facilities have, typically, already been graded and the areas surrounding them have likely already been paved over or landscaped. As a result, further minor modifications at affected facilities that may occur as a result of implementing the 2009 CAP control measures are not expected to alter in any way existing drainage patterns or stormwater runoff. Since this potential adverse impact is not considered to be significant, it will not be further evaluated in the Draft PEIR.

**XVI. f):** The proposed 2009 CAP could require facilities to install air pollution control equipment, such as carbon adsorption devices, particulate filters, catalytic incineration, selective catalytic reduction or other types of control equipment that could increase the amount of solid/hazardous wastes generated in the district due to the disposal of spent catalyst, filters or other mechanisms used in the control equipment. Solid waste impacts would be considered significant if the impacts resulted in a violation of local, state or federal solid waste standards. Also, solid waste impacts would be significant if the additional potential waste volume exceeded the existing capacity of district landfills.

Other control measures may result in potentially significant adverse solid and hazardous waste impacts from the use of particulate filters or baghouses (SSM 1 and SSM 4), accelerated vehicle retirement programs (MSM A-4, MSM A-4, MSM B-1, and LUM 4), evaporative controls utilizing carbon canisters (SSM 8), facility modernization requirements (SSM 5 and ECM 3), early retirement of inefficient, older equipment (SSM 1, SSM 9, SSM 12, SSM 13, SSM 15, SSM 16, SSM 17, SSM 18, SSM 19, MSM C-1, MSM C-2, and MSM C-3), etc. The potential solid/hazardous waste impacts from implementing the proposed 2009 CAP will be analyzed in the Draft PEIR.

**XVI. g):** Adopting the proposed 2009 CAP is not expected to interfere with affected facilities' abilities to comply with federal, state, or local statutes and regulations related to solid and hazardous waste handling or disposal. This specific topic will not be further evaluated in the Draft PEIR.

**Other Utilities/Service System Impacts:** Implementing the proposed 2009 CAP is not anticipated to result in any conflicts with adopted energy conservation plans or violations of any energy conservation standards by affected facilities. Several CAP measures are aimed at increasing energy efficiency (SSM 5, ECM 1, ECM 3, and ECM 4). In some cases facilities complying with 2009 CAP control measures may need to install various types of control equipment, which could potentially increase energy demand in the district. It is expected, however, that owners/operators of affected facilities would comply with any applicable energy conservation standards in effect at the time of installation. Alternatively, implementing the proposed 2009 CAP may result in owners/operators of affected facilities replacing old inefficient equipment with newer more energy efficient equipment, thus providing beneficial impacts on energy demand. Based upon these considerations, however, the net effect of implementing the proposed 2009 CAP is that it is not expected to conflict with any adopted energy conservation plans or energy efficiency standards.

In spite of this, implementing some proposed control measures could increase energy demand in the region at affected facilities. Specifically some types of control equipment will increase demand for electrical power to operate the equipment (SSM 1, SSM 9, SSM 10, SSM 12, AND SSM 16), use Zero Emission Vehicles and Hybrids (MSM A-1 and MSM A-2), encourage the use of green fleets (MSM A-3), electrifying construction equipment (MSM C-1), electrify lawn and garden equipment (C-3), and increased use of hybrid drive trains (MSM B-3). In addition, some of the Land Use and Local Impact Control Measures could encourage the use of electric powered engines including LUM 1, LUM 2, LUM 3, LUM 4, and LUM 5. As a result, implementing proposed 2009 CAP control measures has the potential to result in the need for new or substantially altered power systems and create significant effects on peak and base period demands for electricity. The mobile source control measures may result in potentially significant energy demand impacts from reduced fuel economy due to some diesel engine strategies, alternative fuels, and increased electricity demand due to electrification of equipment and vehicles.



Alternatively, some control measures (ECM-1) will promote lighter colored paving and roofing, and tree planting, which are expected to result in energy conservation because indoor temperatures will be lowered which will lower the demand for cooling. Energy and Climate Measures could also lower energy demand through the use of more efficient, newer technologies. ECM 2 would promote the use of renewable energy generation and encourage the development of solar, wind turbines and cogeneration facilities.

## Conclusion

Based upon the above considerations, the potential adverse wastewater, water supply, solid/hazardous waste, and electricity services impacts from implementing the proposed 2009 CAP will be analyzed in the Draft PEIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? ☒ ☐ ☐ ☐
- 

## Discussion of Impacts

**XVII. a):** Specifically with regard to the biological resources identified in this item, the proposed project is not expected to significantly adversely affect any biological resources including wildlife and the resources on which it relies. Overall improvements in air quality are, ultimately, expected to provide substantial benefits to local biological resources in the district. Therefore, this topic will not be evaluated further in the Draft PEIR.

**XVII. b):** Because the proposed project has the potential to generate significant adverse project-specific environmental impacts in several environmental areas, the proposed project also has the potential to create significant adverse cumulative impacts if project-specific impacts are also deemed to be cumulatively considerable. Significant adverse impacts will be further analyzed in the Draft PEIR if project-specific impacts for a particular environmental topic are deemed significant.

The 2009 CAP also includes TCMs from MTC's Transportation 2035 Plan. MTC prepared the Final PEIR for the 2004 Transportation 2035 Plan (SCH No. 2008022101) (MTC, 2009) to analyze environmental impacts from the Plan. The Draft 2009 CAP PEIR will consider cumulative impacts from implementing the 2009 CAP, including the TCMs evaluated in MTC's Final PEIR for the Transportation 2035 Plan that are proposed to be included in the CAP.

**XVII. c):** The proposed 2009 CAP has the potential to create significant adverse impacts to human beings as a result of the possibility that it could create potentially significant adverse impacts in the following areas: air quality, hazards and hazardous materials impacts, hydrology and water resources, and utilities and service systems. Any significant adverse impact to any of these areas has the potential to adversely affect public health. Potentially significant adverse environmental impacts and feasible alternatives to the project will be analyzed in the Draft PEIR.

## Conclusion

The potential significant adverse impacts to air quality, hazards and hazardous materials, hydrology and water resources, and utilities and service systems, as well, as related cumulative impacts to these resources due to implementing the proposed 2009 CAP will be analyzed in the Draft PEIR.

## REFERENCES

Association of Bay Area Governments, 2006. Projections 2007, December 2006.

BAAQMD, 2006. Bay Area 2005 Ozone Strategy, January 4, 2006.

Metropolitan Transportation Commission, 2009. Final Environmental Impact Report, Transportation 2035 Plan, SCH No. 2008022101, April 2009.

## ACRONYMS

ABAG	Association of Bay Area Governments
ACTM	Air Toxic Control Measure
ARB	California Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BACT	best available control technology
BARCT	best available retrofit control technology
BTU	British thermal unit
CAA	Clean Air Act
CAP	Clean Air Plan
CARB	California Air Resources Board
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
ECM	energy conservation measure
PEIR	Program Environmental Impact Report
EMFAC	California's on-road motor vehicle emission factor model
EPA	U. S. Environmental Protection Agency
GHG	Greenhouse gases
HOT	High Occupancy Toll
HSC	Health and Safety Code
LUM	land use measure
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standard
NSR	new source review
NO <sub>x</sub>	nitrogen oxides
NO <sub>2</sub>	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
PHEV	Plug-in Hybrid Vehicle
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
SCH	State Clearinghouse
SCR	Selective Catalytic Reduction
SIP	State Implementation Plan
SO <sub>x</sub>	sulfur oxides
SO <sub>2</sub>	sulfur dioxide

SSM	Stationary Source Measure
SULV	Super Ultra-low Emission Vehicle
TCIF	Trade Corridors Improvement Fund
TCM	transportation control measures
tpd	tons per day
ULEV	ultra-low emission vehicle
U.S.	United States
VBB	Vehicle Buy Back Program
VMT	vehicle miles traveled
VOC	volatile organic compounds
ZEV	Zero Emission Vehicle



## **APPENDIX A**

### **SUMMARY CONTROL MEASURE ENVIRONMENTAL ANALYSIS**





# Bay Area 2009 Clean Air Plan Draft Control Measures

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact						
					Air		Hazard	Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG			Energy	Water	Solid/Haz Waste
Stationary and Area Source Measures											
SSM 1	Ferrous and Nonferrous Foundries and Metal-Melting Facilities	Limit emissions of organic compounds, fine particulates, toxic compounds and odors from foundry operations and metal melting by requiring efficient capture and control systems	ROG, PM, TACs, odors		X	X					
SSM 2	Composting Operations	Establish best composting practices to reduce ROG, ammonia and odors.	ROG, NH <sub>3</sub> , GHG		X	X			X		X
SSM 3	Digital Printing	Establish VOC limits or control requirements for inkjet, electro-photographic and other digital printing technologies.	ROG		X	X	X				
SSM 4	General Particulate Matter Weight Rate Limitation	Reduce particulate weight limitation as a function of exhaust gas volume and/or as a function of process weight rate.	PM								
SSM 5	Greenhouse Gases in Permitting - Energy Efficiency	Consider greenhouse gas (GHG) emissions during permitting of new or modified stationary sources. This includes (1) adopting GHG CEQA significance threshold for stationary sources, and (2) requiring GHG reduction measures in ministerial permits.	GHG						X		X
SSM 6	Livestock Waste	Establish management practices to reduce ROG, ammonia, PM, GHG.	ROG, NH <sub>3</sub> , PM, GHG, ammonia		X						X
SSM 7	Natural Gas Processing and Distribution	Reduce emissions from natural gas production facilities.	ROG, TACs, GHG (CH <sub>4</sub> )	3					X		X
SSM 8	Vacuum Trucks	Require carbon or other control technology on vacuum trucks.	ROG, TACs		X	X				X	X

**Bay Area 2009 Clean Air Plan Draft Control Measures (continued)**

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact						Utilities and Service Systems		
					Air	GHG	Hazard	Hydrology/ Water Quality	Energy	Water	Solid/Haz Waste		
					Secondary								
SSM 9	Cement Kilns	Further limit NOx and SOx from cement production.	NOx, SOx, PM		X	X	X	X	X	X		X	X
SSM 10	Coke Calcining	Reduce SOx emissions from coke calcining.	SO <sub>2</sub> , PM		X	X	X	X	X	X		X	X
SSM 11	Open Burning	Further limit agricultural burning based on amount of some crops to be burned on a given day.	PM	1, 2									
SSM 12	Refinery Boilers and Heaters	Further reduce NOx emissions from refinery boilers, heaters and steam generators.	NOx, PM		X	X	X	X	X	X		X	X
SSM 13	Residential Fan Type Furnaces	Reduce allowable NOx limits for residential furnaces.	NOx			X			X			X	X
SSM 14	Space Heating	Establish NOx limits for industrial and commercial space heating.	NOx			X			X			X	X
SSM 15	Dryers, Ovens, Kilns	Establish NOx limits for industrial dryers, ovens, and kilns.	NOx		X	X	X		X			X	X
SSM 16	Glass Furnaces	Reduce NOx limits in Regulation 9, Rule 12 for glass furnaces.	NOx		X	X	X		X			X	X
SSM 17	Revise Regulation 2, Rule 2: New Source Review	Amend Reg. 2, Rule 2 to address the District's anticipated non-attainment status of the 24-hour PM2.5 NAAQS. Consider more stringent standards for sources located in areas of sensitive populations as identified by the District's CARE program.	PM		X	X			X			X	
SSM 18	Revise Regulation 2, Rule 5: New Source Review for Air Toxics	Revise Reg. 2, Rule 5, New Source Review of TACs, to impose more stringent standards for new and modified sources located in impacted communities as identified by the District's CARE program.	TACs										
SSM 19	Revise Air Toxics "Hot Spots" Program	Revise the District's Air Toxics Hot Spots program which focuses on existing sources of TACs to incorporate more stringent risk reduction requirements.	TACs		X	X			X			X	X

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact						
					Air		Hazard	Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG			Energy	Water	Solid/Haz Waste
Transportation Control Measures											
TCM A-1	Improve Local and Area-wide Bus Service	Improve transit by providing new Express Bus or Bus Rapid Transit on major travel corridors, fund replacement of older buses, and implementing Transit Priority Measures on key transit routes.	All	4							
TCM A-2	Improve Local and Regional Rail Service	Improve rail service by sustaining and expanding local and regional rail services and by providing funds to maintain rail-cars, stations, and other rail capital assets.	All	4							
TCM A-3	Improve Ferry Service	Improve ferry service by sustaining and expanding Transbay ferry services, consistent with MTC's Resolution 3434 Regional Transit Expansion Program and the Water Emergency Transportation Authority's Ferry Plan.	All	4							
TCM B-1	Implement Freeway Performance Initiative	Improve the performance and efficiency of freeway and arterial systems through operational improvements, including include implementing the Freeway Performance Initiative, the Arterial Management Program and the Bay Area Freeway Service Patrol.	All	4							
TCM B-2	Improve Transit Efficiency and Use	Improve transit efficiency and use through continued operation of 511 Transit, and full implementation of TransLink fare payment system and the Transit Hub Signage Program.	All	4							
TCM B-3	Bay Area Express Lane Network	Introduce roadway pricing on Bay Area highways through the implementation of an express lane network, also known as a High Occupancy Toll (HOT) lane network.	All	4							
TCM B-3	Bay Area Express Lane Network	Introduce roadway pricing on Bay Area highways through the implementation of an express lane network, also known as a High Occupancy Toll (HOT) lane network.	All	4							

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact					
					Air		Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG		Energy	Water	Solid/Haz Waste
TCM B-4	Goods Movement Improvements and Emission Reduction Strategies	Improve goods movement and reduce emissions from diesel equipment through implementation of the Bay Area's Trade Corridors Improvement Fund (TCIF) projects and various BAAQMD funding programs to replace or retrofit diesel equipment.	All	4						
TCM C-1	Support Voluntary Employer-Based Trip Reduction Program	Support voluntary employer trip-reduction programs through implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs. BAAQMD's Spare the Air Program, encouraging cities to adopt transit benefit ordinances, and support Bay Area shuttle service providers.	All	4						
TCM C-2	Implement Safe Routes to Schools and Safe Routes to Transit	Facilitate safe routes to schools and transit by providing funds and working with transportation agencies, local governments, schools, and communities to implement safe access for pedestrians and cyclists.	All	4						
TCM C-3	Promote Rideshare Services and Incentives	Promote rideshare services and incentives through the implementation of the 511 Regional Rideshare Program and Congestion Management Agency rideshare programs including marketing rideshare services, operating rideshare information call center and website, and providing vaupool support services.	All	4						
TMC C-4	Conduct Public Outreach and Education	Educate the public about the air quality, environmental, and social benefits of carpooling, vanpooling public transit, biking, walking, and telecommuting through the Spare the Air campaign and Transportation Climate Action Campaign.	All	1,2						

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact						
					Air		Hazard	Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG			Energy	Water	Solid/Haz Waste
TCM C-5	Smart Driving/Speed Moderation	Educate the public about the air quality and climate protection benefits of reducing high-speed driving and observing posted speed limits.	All	1, 3							
TCM D-1	Improve Bicycle Access and Facilities	Expand bicycle facilities serving transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.	All	4							
TCM D-2	Improve Pedestrian Access and Facilities	Provide funding for projects to improve pedestrian access to transit hubs, employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers.	All	4							
TCM D-3	Support Local Land Use Strategies	Promote land use patterns, policies, and infrastructure investments that support mixed-use, transit-oriented development that reduce motor vehicle dependence and facilitate walking, bicycling and transit use.	All	4							
TCM E-1	Value Pricing Strategies	Test and implement value pricing (congestion pricing) on Bay Area toll bridges to manage travel demand during congested periods. Measure may also include value pricing in the City of San Francisco.	All								
TCM E-2	Parking Pricing and Management Strategies	Promote policies to implement market-rate pricing of parking facilities, reduce parking requirements for new development projects, parking “cash-out”, unbundling of parking in residential and commercial leases, shared parking at mixed-use facilities, etc.	All	1, 2							

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact					
					Air		Hydrology/ Water Quality	Utilities and Service Systems		Solid/Haz Waste
					Secondary	GHG		Energy	Water	
TCM E-3	Implement Transportation Pricing Reform	Develop a regional transportation pricing strategy that includes policy evaluation and implementation. Pricing policies to be evaluated include gasoline taxes, bridge tolls, congestion pricing, parking pricing, HOT lanes, VMT or carbon fees, pay-as-you-drive insurance, etc.	All	1, 2						
<b>Mobile Source Control Measures (On-Road Light-Duty Vehicles)</b>										
MSM A-1	Promote Clean, Fuel Efficient Light & Medium-Duty Vehicles	Expand the use of Super Ultra-low Emission and Partial-Zero emission light-duty passenger vehicles and trucks within the Bay Area.	All							
MSM A-2	Zero Emission Vehicles and Plug-in Hybrids	Expand the use of Zero Emission and Plug-in Hybrid passenger vehicles and light-duty trucks within the Bay Area.	All		X	X		X		X
MSM A-3	Green Fleets for Light, Medium & Heavy-Duty Vehicles	Develop a green fleet certification component of the Bay Area Green Business program, promote best practices for green fleets, and evaluate existing grant programs to ensure incentive funding is directed towards fleets and vehicles that meet stringent fuel economy standards.	All		X	X		X		
MSM A-4	Replacement or Repair of High-Emitting Vehicles	Enhancements to the Vehicle Buy Back program to increase participation from car owners; e.g., via higher cash payments and/or increased marketing. Consider including motorcycles, or other potential enhancements, e.g. implementing the SCAQMD's vehicle repair program. Pursue improvements to the District's Smoking Vehicle program.	All		X			X		X

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact							
					Air			Hazard	Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG	Energy			Water	Solid/Haz Waste	
Mobile Source Control Measures (On-Road Heavy-Duty Vehicles)												
MSM B-1	HDV Fleet Modernization	Provide incentives to accelerate the replacement or retrofit of on-road heavy-duty diesel engines in advance of requirements for the ARB in-use heavy-duty truck regulation.	NOx, ROG, PM									
MSM B-2	Low NOx Retrofits for In-Use Engines	Provide cash incentives to install retrofit devices that reduce NOx emissions from 1994-2006 heavy-duty engines. Continue requiring software updates to engine control modules in model year 1993-1998 diesel trucks as a condition of all heavy duty vehicle retrofit grants.	NOx, ROG		X	X	X				X	
MSM B-3	Efficient Drive Trains	Encourage development and demonstration of hybrid drive trains for medium- and heavy-duty vehicles, in partnership with ARB, CEC and other existing programs.	All		X	X				X		
Mobile Source Control Measures (Off-Road Equipment)												
MSM C-1	Construction and Farming Equipment	Reduce emissions from construction and farming equipment by 1) cash incentives to retrofit construction and farm equipment with diesel particulate matter filters or upgrade to a Tier III or IV off-road engine; 2) work with others to develop more fuel efficient off-road engines and drive-trains; 3) work with local communities, contractors and developers to encourage the use of renewable alternative.	All		X	X	X					
MSM C-2	Lawn & Garden Equipment	Reduce emissions from lawn and garden equipment through voluntary retirement and replacement programs.	All		X	X				X	X	
MSM C-3	Recreational Vessels	Reduce emissions from recreational vessels through voluntary retirement and replacement programs.	All			X	X				X	

# Bay Area 2009 Clean Air Plan Draft Control Measures (continued)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Potential Impact						
					Air		Hazard	Hydrology/ Water Quality	Utilities and Service Systems		
					Secondary	GHG			Energy	Water	Solid/Haz Waste
Land Use and Local Impact Control Measures											
LUM 1	Indirect Source Review Rule	Develop an indirect source review rule to reduce construction and vehicular emissions associated with new or modified land uses in the Bay Area.	All		X	X	X				
LUM 2	Enhanced CEQA Program	1) Develop revised CEQA guidelines and thresholds of significance and 2) expand District review of CEQA documents.	All		X	X	X				X
LUM 3	Reduce Risk from Stationary Sources in Impacted Communities	Establish a system to track cumulative health risks associated with permitted stationary sources in order to monitor progress in reducing population exposure in impacted communities as identified by the District's CARE program.	TACs								
LUM 4	Goods Movement	Reduce diesel PM and GHG emissions from goods movement through targeted enforcement of CARB diesel ATCMs in impacted communities, partnerships with ports and other stakeholders, increased signage indicating truck routes and anti-idling rules, shifts in freight transport mode, shore-side power for ships, and improvements in the efficiency of engine drive trains, distribution systems (roadways, logistic systems) and land use patterns.	PM, GHG		X	X			X		X
LUM 5	Land Use Guidelines	Provide guidance to local governments re: 1) air quality and greenhouse gases in General Plans, and 2) how to address and mitigate population exposure related to infill development.			X	X	X		X		X
LUM 6	Enhanced Air Quality Monitoring	Expand monitoring program to provide better local air quality monitoring data in impacted communities.	na	3	X	X	X		X		X



# Bay Area 2009 Clean Air Plan Draft Control Measures (concluded)

Control Measure Number	Source Category	Description	Pollutant	Not Signif.	Energy and Climate Measures					Potential Impact			
					Secondary	GHG	Hazard	Hydrology/ Water Quality	Energy	Water	Solid/Haz Waste		
ECM 1	Urban Heat Island Mitigation	Mitigate the urban heat island effect by requiring and promoting cool roof, cool paving, and other strategies.	All					X	X	X			
ECM 2	Renewable Energy	Promote distributed renewable energy generation (solar, micro wind turbines, cogeneration, etc.) on commercial and residential buildings, and at industrial facilities	All		X				X				
ECM 3	Energy Efficiency	Provide 1) education to increase energy efficiency; 2) technical assistance to local governments to adopt and enforce energy-efficient building codes; and 3) incentives for improving energy efficiency at schools.	All										
ECM 4	Tree-Planting	Promote planting of low-VOC-emitting shade trees to reduce urban heat island effects, save energy, absorb CO2 and other air pollutants.	All	I									X

1. Control technologies do not generate significant impacts
2. Changes in operating practices with no impact identified
3. Changes in testing, inspection, or enforcement procedures with no impact
4. TCMs that were evaluated as part of the Transportation 2035 Plan EIR (2009) prepared by the MTC

